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SOME SUGGESTIONS ON TAX REVISION

Part One

Errors and Evils of Our Taxation System

By OTTO H. KAHN

I HOPE you will not diagnose my case as that of a "single-track" mind if I place in the forefront of the matters which call for immediate consideration and remedial treatment, the gross faultiness of our system of taxation. It is a subject on which I have written and spoken, perhaps all too frequently, ever since Congress took up the problem of raising revenues to meet our war requirements in the spring of 1917. I have the melancholy satisfaction of knowing that, in the main, the warnings which I ventured to express when the first war revenue measure was under consideration have been all too fully borne out by the facts.

I believe it is not too much to say that our existing taxation measures in various important respects fly in the face of economic science, of common sense and of equity. They are cumbersome, vexatious and almost incredibly complex. They bear the imprint of class and sectional discrimination. They penalize thrift and industry, and leave the wastrel and shirker untouched. They discourage,

disturb and impede business, and place the American business man at a disadvantage as against his European competitor. At a time when America is aiming to become a world centre, they deter foreign capital from coming here.

They throw upon the Government an administrative task of such vastness and intricacy that the departments concerned simply cannot cope with it. They tend to curtail productions. They are a strong contributing factor in bringing about the prevailing high level of prices—a grave and serious evil which can and must be mitigated, a grievous burden particularly upon those men and women who live on moderate salaries and who are all the more entitled to sympathy and redress, as they have borne their troubles with great patience and a noteworthy absence of importunate agitation.

I hope you will do me the justice of believing that I should have my own contempt, as I should deserve yours, if I came before you with the idea of advocating a plan of taxation from the point of view of the man of wealth. My eagerness is not to gain, but to serve. Materially and in other ways I owe a heavy debt to this my adopted country, and I am anxious to repay such part as I may, by placing at its disposal my experience and modest capacities for what they may be worth.

With the right solution of the problem of taxation and other economic questions which now confront the nation, our prosperity and progress in the years immediately before us are largely interwoven. I do not claim that the views which I hold on these complex subjects are free from error. I do claim that they are free from the bias of conscious self-interest.

I am advocating a policy and methods of taxation which, while taking sincere and sympathetic account of equity and social justice, shall not have resemblance to the spirit and temper of the plausible stump speaker, but shall be based upon recognition of the teachings of history and economics and practical experience, and bear the im-

print of reasonableness and dispassionate thinking, free from either class or sectional favoritism or class or sectional animosity.

It may be permissible to mention that I have always favored and advocated a progressive Federal Income Tax, and that I not only declined to join, but actively discountenanced a contemplated movement to secure in the New York and other legislatures the defeat of the Constitutional Amendment which authorized such a tax. And just as I am in favor of taxing individual incomes, so I am in favor of taxing corporate profits.

Most of the causes contributory to the existing era of economic disturbance and high prices, such as the effects of the devastation of war and of diminished production during the conflict, the workings of monetary inflation, the natural psychic reaction following the war, the errors of post-bellum diplomacy, etc., are so manifest and have been so frequently and exhaustively discussed, that they are well understood by the people. But the influences of faulty taxation are more subtle, less easily discerned and are generally avoided by the public speaker as a topic of discussion, because to elucidate them means to make oneself the vehicle for pronouncing some unpopular truths.

I am convinced that the effect of the faultiness of our system of taxation is all-pervasive—that you find it among the basic influences wherever you look for the true causes of our economic troubles, including lack of transportation facilities, insufficient housing accommodation, retardation or other abnormalities of production and distribution; high rents, high prices and extravagance.

I believe that it is as harmful as any other single factor now at work (if not more so) in affecting the prosperity and well-being of the people and especially the people of small and moderate means.

The cure for inflation and certain other after-effects of the war, which afflict us, is a slow process. The remedy, however drastically applied, needs considerable time to produce its effects. Moreover, in some respects the

remedy must not be applied too drastically. For instance, we must not permit the remedy of deflation to be used so rigorously and indiscriminately as to bring on by itself an *excessive* stringency in the credit and money market, and thus cripple production by making too difficult of access the financial facilities necessary for the processes of production and distribution.

But the cure for the evils flowing from the errors of our taxation system can be effected *at once*. The remedy can be applied and the resulting relief to the people obtained as soon as it pleases Congress and the Administration to take appropriate action.

II

He who would lead the people to believe that they can be benefitted or, indeed, that they are other than greatly harmed by oppressive taxation of capital, fools himself or attempts to fool others. Almost every one of the taxes now in usage affects all the people in its consequences, however hidden or remote may be the causal connection. The widely held impression that the income tax cannot be shifted is true only to a limited degree, and, moreover, the evils growing out of our present unprecedented scale of savage supertaxation, far exceed the virtue of what measure of "non-shiftability" adheres to the income tax.

If our extreme surtaxes on incomes and our excess profit tax had the effect of breaking the vicious circle of price-boosting and wage-boosting, if these taxes had power to eliminate or curb "profiteering," much might be forgiven them.

But experience has proved that not only have they no such effect and no such power, but indeed they have tended to greatly intensify those evils. There can be little doubt that the excess profit tax in its existing form and the high surtaxes are in effect nothing less, to a large extent, than disguised and inflated consumption taxes.

The ideal tax is one that rests where it is laid. That is, to a considerable degree, attainable in the case of

reasonable and moderate taxes, but only in that case. In proportion as a tax is grossly excessive or palpably unsound, in that proportion is it liable and likely to be avoided or passed on.

Moreover, those who devised our scheme of taxation have hardly been quite frank with the people. They have loudly claimed credit for democratic taxation in that, more than anywhere else in the world, they have professedly imposed class taxation in order to relieve the masses. But even if such an effect were possible—which it is not—they must have known, or if they did not they should have known, that their whole glittering scheme of unparalleled super-taxation was vitiated by the fact that there are some fourteen billions of tax-exempt securities outstanding, i. e., Municipal and County Bonds, State Bonds, Farm Loan Bonds, and (unless otherwise specifically provided) Federal Bonds. All of these are wholly beyond the reach of the income tax. And more of them are coming out all the time.

What has been the result? To begin with, our investment market has been thrown out of joint and our mortgage market is crippled. The possessors of incomes of considerable size are more and more withdrawing from them and placing their money into tax-exempt securities to the extent that it is possible for them to do so. I am not saying this from hearsay. I am stating facts within my own knowledge and experience. Statistics recently compiled on the part of certain leading investment houses show that the average individual subscription to new issues of taxable securities is but one-quarter nowadays of what it was four years ago. And why should this not be so? Consider the table which I am about to present. It shows what percentage a person would have to obtain from his business or from investing in taxable securities in order to bring him on his income subject to the maximum tax, the same return which he can get by simply investing in tax-exempt bonds. Such tax-exempt bonds can now be bought to bring an interest yield of $5\frac{3}{4}$ to 6 per

cent. In order to equal that interest yield, a person would have to make in his business or from his ordinary investments the following percentages—the scale rising of course, i. e., the advantage of tax-exempt investments increasing, as the supertax increases. Here is the table * based on a nontaxable yield of $5\frac{3}{4}$ per cent.

If he has an income exceeding—	Per Cent.
\$ 20,000 he would have to make	7.01
30,000 he would have to make	7.50
40,000 he would have to make	7.99
50,000 he would have to make	8.71
60,000 he would have to make	9.42
70,000 he would have to make	10.27
80,000 he would have to make	11.27
90,000 he would have to make	12.50
100,000 he would have to make	14.02
200,000 he would have to make	17.42
300,000 he would have to make	19.83
500,000 he would have to make	22.11
1,000,000 he would have to make	23.96

You see, therefore, that a man in the higher super-tax classes, beginning with those earning incomes of say \$50,000, actually makes an investment yielding him from $8\frac{3}{4}$ per cent to 24 per cent if he puts that part of his income which is subject to the maximum tax (and that is much the largest part) into a $5\frac{3}{4}$ per cent tax-exempt bond, as compared to putting it to work in his business or investing in ordinary bonds or in mortgages.

Personally, I do not favor the institution of tax-exempt securities, because I believe it economically unsound and socially objectionable—but we are confronted with a condition not a theory.

The discrimination which permits the owner of liquid capital to escape all direct taxation by the simple expedient of buying tax-exempt bonds, becomes naturally all the more effective and accentuated as the income surtax rate increases.

Is it to be wondered, under these circumstances, if the well-to-do investor has withdrawn from the mortgage

* In this calculation, the New York State Income Tax which ranges from 1 per cent to 3 per cent, is included.

market, and money for all kinds of enterprises is excessively hard to find?

It may be said, "Well, supposing a man with a very large income is made to pay up to three-quarters of it in taxes. He still has plenty left." Granted—but that is not the point. The point is not what happens to the rich man—he can protect himself—but what is the effect upon the country? Capital for business or for corporate investments is a necessity for the upkeep and expansion of trade and industry. And it is out of annual savings of the individual, after meeting living expenses and taxes, that the means are provided for that necessity. Excessive surtaxes accomplish double harm: They greatly diminish the incentive to thrift and they appropriate to an undue extent the means which ought to be available for industry and enterprise. And those means are more than ever needed at present, first, because the world is urgently in need of increased production after nearly five years of underproduction during the war, and, secondly, because merely to do the same volume of business as before the war a great deal more capital is required nowadays, owing to the largely increased cost of labor and materials.

As the New York *Tribune* has well said in a recent editorial:

"The clutch of the surtaxes is not only on the throat of the builders, but on the throat of all business. Two billion of profits which normally would be reinvested in improvements of general benefit is grabbed by the Government, and even more pours into exempt, non-business, public debt securities. Is it strange there is a shortage of capital available for business use?"

And what degree of material inducement is there left to a man to work hard and long hours and to take upon himself the drudgery, the cares, worries and risks incidental to every business, when the larger part, and often much the larger part, of what he may make as the results of his effort and venturing is taken away from him by the Government—not during war time, when no decent-minded man hesitates or questions about bearing whatever burden may be placed upon him, but in time of peace, by

methods of taxation, moreover, which (being unscientific and ill designed) do not work evenly and equably, but to a large extent freakishly and haphazardly?

Fortunately, it is not only material inducement which counts. It is to the credit of our business men that in spite of the difficulties, handicaps and discouragements caused by our methods of taxation, few have dropped out of the race, and that zest for work, joy in achievement, worthy ambition, and a sense of duty have kept the overwhelming majority of them at work as hard as ever. But I do know of some who have given up in weariness and dejection, and it is a fact that there has been a distinct and undesirable disinclination to set out on new ventures and to give full scope to the hazards of enterprise.

Let me point out, incidentally, that the spectacular earnings of certain corporations and individuals afford no just criterion of the earnings of business on the whole.

As against a number of concerns and individuals who have made exceedingly great profits during and since the war, there are numerous others whose earnings have shrunk, and in some cases very greatly shrunk, during and since the war.

And it is astonishing that many a business man, however free from the objectionable tendencies of the profiteer, seeks to augment the material inducement normally adequate but now vastly reduced through taxation, by adding somewhat to his margin of profit, with the result that costs are increased? Indeed, in many cases, *it is necessary* for him to add to that margin, quite irrespective of profits, because otherwise, through the exactions of taxation, the cash resources indispensably essential to the conduct of every business, would be infringed upon to a perilous degree, if not to the point of extinction.

In fact, one of the most unsettling influences of our taxation system is the excessive and ill-regulated cash drain which it creates, away from its normal channels into the coffers of the Government. You cannot pay your taxes by turning over book assets or bills receivable or materials

or inventories. You must pay them in cash. But while the outgo in taxes payable to the Government is all cash, the income of most businesses is cash only to a limited extent.

III

The effect upon the country's prosperity and activities of the malfunctioning of the investment market, for which the combination of unparalleled supertaxes and a vast volume of tax-free securities is in large part responsible, is far too little appreciated. Every industrial activity, including that of the farming industry, is affected by it. Production is hampered and the cost of everything enhanced. The free flow of capital, the normal working of the investment market, are absolutely basic elements for every kind of industrial "normalcy." The effects of their disturbance to any serious degree for any length of time are all-pervading.

Incidentally, that disturbance has done grievous damage to all those of moderate and small means who had placed their savings into bond investments, because the shrinkage in the value of those investments from the time these taxes were first imposed, i. e., since 1917, amounts to an enormous loss to them.

It is interesting to note in this connection that there has taken place a considerable readjustment in the distribution of the nation's income and capital since the war. As compared to normal pre-war conditions, the net earnings of business on the whole, after deducting taxes, have probably increased but little if at all, while the earnings of the agriculturalist have been considerably augmented and those of labor about doubled. The capital value of farms and the capital value of manual labor have greatly increased, while the capital value of all fixed interest-bearing investments has been very largely diminished.

And it is worth recording in relation to this subject that the frequently heard assertion that the great bulk of the

wealth of the nation goes into the coffers of a small number of rich men, is wholly false.

The fact is, on the contrary, that about seven-eighths of our national income goes to those with incomes of \$5,000 or less, and only about one-eighth to those having incomes above \$5,000. A carefully compiled statement issued by the Bankers Trust Company of New York some eighteen months ago estimates the total individual incomes of the nation for the fiscal year ending July 30, 1919, at \$53,000,000,000, and finds that families with incomes of \$5,000 or less received \$46,000,000,000 of that total.

A recent compilation concerning some sixty of the best industrial companies in Germany, over a period of ten years, ending April 1, 1918, showed that out of each \$1,000 earned, \$767 went to labor, \$117 to meet taxes and \$116 to pay returns to investors.

If the entire amount thus paid out in dividends on capital had been turned over to the workmen instead, i. e., if the compensation to capital had been entirely eliminated, the result would have been that the average rate of wages would have been increased by less than three cents per hour, which would have amounted to a wage increase of about \$65 per year for each person employed.

I have not the data available for a similar analysis of the ratio of distribution of the fruits of industry between capital and labor in America, but from such cursory investigation as I have made, I am satisfied that the resulting picture here would not be very different from that which the investigation in Europe has disclosed.

It is not true that under our economic and social system "the rich are getting richer and the poor poorer." On the contrary, the diffusion of wealth has been going on apace; the trend of things within the past twenty years has been greatly toward diminishing the difference in the standard and general way of living between the various categories of our population.

IV

The cost of money since the present taxes were enacted has risen at least fifty per cent, and as the cost of money necessarily enters into the calculation of every manufacturer and merchant, that item alone has, of course, been one of the potent factors in making for higher prices. But, more than that, the throwing out of gear of the investment market and the driving of capital into tax-exempt securities, has made it exceedingly difficult and costly, and in many cases impossible for corporations to meet at least part of their financial requirements by having recourse to that market through selling securities, as they normally were in the habit of doing. Consequently, they find themselves compelled to resort to the banks for loans and credits to a much greater extent than formerly, thus competing for such accommodation with the smaller individual merchant and manufacturer and agriculturalist, and thereby greatly intensifying the jam and congestion and difficulty of the credit situation.

I do not mean to say that the evils to which the foregoing paragraphs relate are due solely to unwise taxation, but I am convinced that unwise taxation bears a larger share of responsibility for these adverse conditions than any other factor.

It may be appropriate to refer in a few words to a comparison of our income taxation with that of England. In that country, taxation starts with incomes (for married men) of £225, here with incomes of \$2,000. The English tax on the smaller incomes, say, up to \$5,000, is, on the average, from six to ten times as heavy as ours. On the other hand, our tax in its upper scale is far heavier than that of England. The English maximum taxation is 60 per cent, but profits made by a person otherwise than in his regular business are not subject to income tax at all in England. Our maximum taxation is 73 per cent, and applies to all sources of income or profit (except tax-exempt securities). That is the highest scale of income taxation

existing anywhere in the civilized world. In addition, we have State income taxation in many of the States.

The English *Normal Tax* is 30 per cent with certain abatements in accordance with smallness of the income taxed. Our Normal Tax rate is 8 per cent with an abatement to 4 per cent on the first \$4,000 of taxable income.

On the other hand, the highest English *surtax* rate is but 30 per cent, while ours is 65 per cent.

That is to say, in England the highest income tax payer is taxed at a rate twice that applicable to the lowest tax payer (exclusive of those tax payers whose income is so small as to be materially affected by abatements.) With us, the highest income tax payer is taxed at a rate seventeen times as heavy as that applicable to one whose income is between four and five thousand dollars a year.

Our scale of income taxation in respect to small incomes is juster and wiser than the English scale, and is greatly preferable to it, but our moderation in respect to taxing small incomes makes all the more conspicuous the unnecessary and harmful extreme to which we go at the other end of the scale.

Perhaps the most conspicuous example of the effect of our taxation in stifling enterprise and preventing capital from accomplishing its normal and necessary function, is seen in the acute housing situation throughout the country.

To quote from the testimony of Mr. John L. Parish, Secretary of the Advisory Council of Real Estate Interests of the City of New York, before the United States Senate Committee on Reconstruction and Production:

"The withdrawals from mortgage investments in real property in the Borough of Manhattan during the first six months of 1920 amount to approximately \$83,000,000 net.

" . . . That indicates a rate of withdrawal from investment in mortgages in Manhattan alone of over \$165,000,000 a year.

" . . . An explanation of this unprecedented course of investment money will be sought in vain outside the operation of the income tax laws. . . . This may not have been foreseen when the law was enacted, but the experience of the last three years, and the cessation of housing construction and the prostration of the mortgage market has afforded a demonstration of which there can be no question."

Urgent and nationwide demand has now arisen for a remedy and for relief from that serious situation. The great majority of those who have testified on the subject before the Senate Committee on Reconstruction and Production and before local bodies advocate what?

The freeing of mortgages for the construction of private dwellings from the State and Federal Income Tax. In other words, the evil of the present surtax schedule, supposed to be of concern only to the rich, is proving so serious and intolerable in its effect upon the necessities of the masses that the volume of tax-free securities in which capital can take refuge is to be still further increased! That means simply turning in a vicious circle.

Moreover, what is true of the housing situation is true of every other situation. Only, in other instances, the result is not so plainly discernible and not so directly felt by the people.

Precisely the same thing which faulty taxation has so largely brought about in stopping building, by discouraging and laming enterprise and making money hard to obtain or not obtainable at all, it has accomplished in a greater or lesser degree in every other field of industrial activity. And the cure cannot be found in the haphazard removal of *all* taxation where clumsily applied taxation presses upon a particularly sensitive spot, as in the case of the housing situation. The cure can only be found in bringing about wisely remedial treatment for the whole economic body of the nation.

V

I have spoken mainly of some—by no means all—of the harmful effects of our huge surtaxes (the maximum rates of which are unequalled in any other country) because these effects have not received as yet the general public attention which they merit, although such attention has been invited by President Wilson, Secretary of the Treasury Houston and Assistant Secretary Leffingwell.

Apart from the scale of taxation, there are various pro-

visions in our income tax law which handicap the American business man as against his European competitor.

A common characteristic of these provisions is that while nationally harmful in their effect, they are little productive of revenue.

Thus, for instance: A free inflow and outflow of foreign funds is essential to the functioning of a financial and commercial world centre. In recognition of this fact, England not only does not tax bank deposits belonging to aliens, but, on the contrary, offers special inducements to attract such deposits. But Congress has subjected such bank deposits here (as also foreign holdings of American commercial paper) to the American income tax and thereby naturally deterred them from coming here.

Or, another instance: The practice in England is that foreign holders of British securities are taxed only at the rate of her normal income tax. No filing of schedules or other formalities are exacted from them and they are not taxed at all on profits realized from buying and selling bonds or stocks in the English market. Likewise, in the case of dividends on stocks, if the corporation itself pays the normal tax in respect of such dividends—which is the rule rather than the exception—foreign holders are subjected to no tax at all. Our Congress, on the other hand, subjects foreign holders of American investments to the full weight and complexity and obnoxious formalities of the American Income Tax.

I refrain from discussing the Excess Profits Tax because its basic faultiness, the intolerable complexity of its technical provisions, its uneven application and its baneful effects in various directions, have become so widely recognized that in its present form it has few defenders left, and both the great political parties are committed to its revision.

Time does not permit to go into the subject of taxation and its far-spread ramifications at greater length. Suffice it to say that I am convinced no remedy for the high cost of living and the other abnormal conditions which are weighing upon the country can be effective which does not

include a wise and courageous revision of our existing taxation system.

Such a revision is not really a task of great difficulty. For a country as immensely rich and intrinsically as little burdened, relatively speaking, as ours, it is not a very hard problem to raise by taxation the sum which the economical administration of our Government requires without causing the sinister effects that our present taxation has brought about, indeed without causing any serious economic disturbance whatever. And that should be feasible without in any way impairing the fortunate and desirable circumstance that in our country those of small or moderate means are taxed far less, both in direct and indirect taxation, than they are in any other of the leading countries. The alternative is not to burden unduly either business or the people. The idea is not of relieving the former at the expense of the latter. The end which should and can be attained by proceeding wisely, is to benefit both business and the people at large.

It is quite true that even with strict economy in Government expenditures, the burden of taxation must necessarily be considerable for years to come.

But every one who has ever had to carry a heavy load knows that the secret of carrying it with relative ease, lies in the way in which it is adjusted. Our tax burden is grossly mal-adjusted. By rearranging it we can vastly lighten the pressure of the load upon the backs of the people and particularly of the so-called middle classes, on whom it now rests with especial and most regrettable heaviness, because they are not in a position, generally speaking, to make their compensation keep pace with the mounting costs of living. And among the principal causes for those mounting costs is our faulty taxation.

A good deal may be said for the contention that the system of taxation inaugurated in 1917 was in accord with the prevailing sentiment of the time and had to be given a trial. The theory which underlies it has rightly a strong appeal.

Well, that system has now had a three years' trial. We have seen the theory applied in practice for a sufficient length of time to test it out. We have had in operation for three years a scheme for raising revenue, which is unscientific, inconsistent and ill-designed and has as its principal characteristic the taxation of business and constructively employed capital in a way without a parallel in any other of the leading countries.*

The result is writ large in effects hampering and troubling to the nation and burdensome to all, but particularly to those who were intended to be the beneficiaries of that system and that theory, *i. e.*, the plain people. The revenue measure of 1917, re-enacted essentially unchanged for 1918 and 1919, stands disclosed as a breeder of grave harm by the inexorable test of actual experience.

(To be Concluded in December Number)

* I exclude Germany from this comparison, because the fiscal measures to which defeated and distracted Germany is compelled to resort in its extremity, afford, of course, no criterion for tax legislation appropriate and tolerable in other countries.

WAS IT BECAUSE?

By JACK HYATT, JR.

A MINISTER told me today, Dear God
 . . . in words of wonderful faith . . .
 That in your workings
 . . . on Earth and in Heaven
 Always you multiply, never subtract.

Then WHY did You take *her*
 . . . away . . . from me;
 Was it because
 You, whom she loved more than me
 Loved her more than I?

HAVE WE LOST JAPAN'S FRIENDSHIP?

By EDWIN WILDMAN

"This country should feel for Japan a peculiar admiration and respect . . .

"There is not the slightest real or necessary conflict of interest between the United States and Japan in the Pacific."—*Theodore Roosevelt* (1918).

TO the average American, engrossed in his daily pursuits, Japan is a land of romance and charm. On the screen, and in the playhouse, in their art, and on our business streets where Japanese wares are displayed for sale, Japan is not reflected in a manner interpretative of her expanding strength as a great nation.

Our press is so filled with European, Mexican and South American affairs, that the public's eyes is directed to our nearer neighbors. Japan is the least known of our well-known neighbors, and the most misrepresented, and badly represented. Conflicting propaganda about Japan confuses the public mind to a lamentable extent. Japan has for seventy years been our pupil and the eager son of our teachings and liberties. Our Western coast has embraced and repelled her, and our diplomatic policy has been both fair and unfair, in accordance with the political exigencies of the moment. We have lacked consistency and definiteness in our official attitude. The uncertainty of our policy has given Japan a political question at once disturbing at home and the opportunity of our rivals in her friendship abroad.

Japan has outgrown her racial and economic isolation.

She is the busiest nation in the world. She is a bee-hive of industry and her aptitude for contemporary life is expanding with a celerity unparalleled in modern Oriental races. Racially, she is an entity, and is moved by a common thought, a united pulsation, and nationality is her religion. She is race proud and resents discrimination, at the same time intelligent enough to make the fight to prove her equality.

The time has come when recognition of her position must be accorded. To deny her is to stimulate her to, perhaps, pernicious activities, equally detrimental to her own well-being as to ours.

The Japanese merchant, statesmen, and laborer are the equal of any, in intelligence and industry, in their own way, and not wanting in adaptability to the application of their abilities in foreign methods and means of getting results. Antagonists of Japan's ascendancy to the position of world power are inspired by self-interest, and not by reason and knowledge. Her abundance in population and production, since the war, has been revealed, and her prosperity has been turned to account at home by increasing her defenses and enlarging her scope of activities in adjacent territory. These acts have been viewed with suspicion by her enemies. They should be viewed with approbation. Japan's strength is today the backbone of the Far East. She is the one nation in all the Far East we can deal with, diplomatically and commercially, dependable. Through her is the rehabilitation of China possible.

Let us glance at a few of the aspects of the Japanese question up-to-date.

OUR TRADE WITH JAPAN

Japan, it should be understood, is America's fourth greatest customer, purchasing during the last fiscal year \$452,000,000 worth of goods. And Japan ranks third in selling goods to the United States, the principal items being raw silk, waste silk and habutai.

Nippon buys from us raw cotton, structural iron and

steel and ingots, engines and machinery, chemicals, paper and petroleum. In 1918 her purchases of raw cotton totaled 205,000,000 yen.

In 1913 Japan's imports from America amounted to but 16 per cent of her total imports; today they amount to 37 per cent.

So, after England, Canada and France, Japan is America's best customer. It is well to keep this in mind.

Now, as to all this sensational talk about Japanese naval construction on an unexampled scale being pushed to the limit, what are the real facts?

IS JAPAN PREPARING FOR WAR?

At an "extraordinary session" of the Japanese Diet recently some "colossal estimates" were introduced in connection with Japan's projected big navy. A member wanted to know the reason why,—in view of the fact that the session was specially called to consider other matters that admitted of no delay, and expressed the fear that Americans "would ascribe sinister intentions to the Japanese Diet which, notwithstanding an unfavorable economic situation and the restoration of peace, went the length of carrying the estimates through at an extraordinary session."

In reply the Prime Minister, Mr. Hara, said, among other things:

"It is superfluous to say that Japan is not actuated by any aggressive ambition . . .

"It is impossible to say with regard to any program that its delay for a year or half a year would be absolutely ruinous, but the government is convinced that in view of the grave importance of national defense the program which has been outstanding for some years ought to be attended to as quickly as possible.

"As you are aware, Japan is now among the Five Great Powers of the world, and it is important for her to be provided with armaments commensurate with her position in world politics. I feel sure that the present national defense

program will excite no misunderstandings abroad and that Japan will not be credited with any ambitious designs."

Though there are several grave questions now pending settlement between the United States and Japan, there seems no reason for doubting Premier Hara's candid explanation.

The estimates which the member of the Japanese Diet termed "colossal" call for the spending of 450,000,000 yen in the construction of three fleets, each squadron to consist of eight dreadnoughts, eight cruisers, and the necessary destroyers. Their Navy Department will spend for the fiscal year, 1920, 22,190,000 yen; for ordinary expense (1919-20), 63,890,404 yen, extraordinary 64,331,780 yen, and the construction of the ships is to cover a ten-year period.

A naval construction program extending through *ten years* does not indicate that Japan is making any frantic effort to prepare herself for a coming war with the United States or any other power.

A DEMAND FOR RACIAL EQUALITY

Since Premier Hara replied to the foregoing question a report has come from Tokio to the effect that the Japanese Government will firmly demand racial equality from the League of Nations Council.

This demand may be provocative of great embarrassment, to say the least, for it clashes with the United States immigration laws, any interference with which, so far as California and perhaps several other Western States are concerned, will not easily be tolerated.

The California land-holding question, which is to be decided soon by a referendum, is one that is causing intense indignation in Japan, and Japanese newspapers declare that America is unwilling to give Japanese equal treatment with other nations. And the labor-unions of Japan on September 22nd adopted resolutions pledging "harmonious co-operation" with the Japanese laborers of California in their insistence upon their lawful rights.

Right on the heels of this the Japanese Envoy to the United States, Shidehara, informs our State Department that he has been authorized by his Government to open formal negotiations relative to the proposed California law, and other pending questions between Washington and Tokio.

Japan, it must be remembered, is still "standing pat" in Siberia and in Sakhalin and still holds Shantung.

As to Siberia, Premier Hara declared recently that Japan will withdraw her troops except from those localities "where consideration of the empire's defence made the stationing of troops imperative." He further assured the provincial governors that America and Japan would reach an agreement "in view of the historical friendly relations between the two countries."

The leader of the Japanese Opposition party, however, predicts that Japan's defeat in California will mean her defeat in China and Korea. It will lower her prestige to this extent.

JAPAN'S MERCANTILE-MARINE STATUS

Meanwhile, in addition to the activities of her Navy Department, Japan is pushing ahead with her mercantile-marine construction at a tremendous rate. For many months past large ships have been launched weekly.

The Kawasaki Dockyard (which recently paid a dividend of 40%) is said to have broken the world's shipbuilding record when it built and launched the 9,000 ton *Raifuku Maru* in twenty-three days. During 1919 Japanese ship construction totalled 137 vessels (tonnage 622,949) of which 30 were for the United States Shipping Board.

All the big Japanese shipyards are working at high pressure, not only on merchant ships but on cruisers, destroyers, battleships and submarines.

Before the war Japan ranked sixth among the Powers in tonnage, but today she stands third, as shown in the following table:

GROSS TONNAGE 1913		GROSS TONNAGE 1919	
Britain	1,980,492	U. S. A.	4,075,000
Germany	485,226	Britain	1,978,000
U. S. A.	276,448	Japan	620,000
France	176,093	Holland	137,000
Holland	104,296	Italy	83,000
Japan	77,609	Norway	57,000

Recently, however, shipping business in Japan began to slacken following the slump in general business. "Except for a few contracts for coasting and near-sea service," says a recent despatch from Japan, "there is scarcely any business on the charter market." In fact, the financial reaction not only in Japan but in Great Britain and America has affected ocean shipments, and the demand for ocean tonnage has further decreased.

According to latest Japanese official statistics there were 779 steamers, each with a capacity exceeding 1,000 tons, plying on the various trade routes of the world at the end of June last, their combined tonnage aggregating 2,603,031. This shows an increase of 14 vessels and 37,116 tons over the similar figures of the previous month.

Compared with previous returns nine steamers with a combined tonnage of 48,988 increased on the coastal lines and the Japan-China route, while on the deep sea lines, a decrease of ten ships is noted.

Japan's fear of American monopoly of Far Eastern business through her new merchant marine accounts in great measure for her shipbuilding activity.

WHY JAPAN MUST HAVE MORE TERRITORY

Unless we understand Japan's population problem, it will be hard clearly to interpret her political acts.

For several centuries Japan's population, due to feudalism, remained stationary. In 1621 it was, in round numbers, 25,000,000; in 1846 it was not quite 27,000,000. But when on March 31, 1854, Japan opened her doors to the world, a great change came and by 1915 the population had increased to 55,638,603, an increase, since 1910, of 6,307,565. Her population today is above 60,000,000.

Now when it is remembered that Japan has an area of

only 147,655 square miles, which is 8,355 square miles less than California, and that the number of her inhabitants per square mile is 376 as against 28 for the whole of America, and France 191, and that 52.86 per cent of her land is mountains, leaving less than 35 per cent for agriculture—when we ponder these facts the overcrowding of this country less than half the size of Texas becomes glaringly apparent.

Already a prudential birth-control is being practiced, but, like the Canadian Northwest for England, our own great Northwest for us, Siberia and Manchuria constitute Japan's "Promised Land,"—a fruitful territory for peaceful occupation.

Meantime the pour-parlers between our State Department and Ambassador Shidehara are continuing, and the idea that any trouble is looming up on the horizon is scouted in the capital. America's navy is superior to Japan's, and the country of the Rising Sun is not likely to measure swords with Uncle Sam, despite the jingo clamor of its press and the hot-heads among the populace.

THE GUARDIAN OF EASTERN ASIA

In fact astute diplomatists are hinting that Japan is using the California Land Law as a lever with which to gain permanent concessions in Eastern Asia. She is determined to secure and hold as predominating an influence in China, as England, say, does in India.

Is she entitled, either logically or in other ways, to her rapid but hard won supremacy in Eastern Asia?

Will she be *Jekyll* or *Hyde* to China?

Japan's Chinese policy has never changed, and this policy was clearly explained by Viscount Ishii, head of the Japanese War Mission, when he was in the United States. He said:

"Not only will we not seek to assail the integrity or the sovereignty of China, but will eventually be prepared to defend and maintain the same integrity and independence of China against any aggressor."

And the Viscount closed his eloquent address (at Fair Haven, Mass., July 4th, 1918) with these words:

"We trust you, we love you, and, if you will let us, we will walk at your side in loyal good-fellowship down all the coming years."

These are lovely expressions of friendship, no doubt, and when uttered undoubtedly sincere;—but in view of the fact—because of the general indignation in Japan over California's pending land-holding law—that Field Marshal Yamagata has been called in council by Foreign Minister Uchida, while concurrently Japan's Ambassador to the United States is seeking a settlement of this vexed question, it is reasonable to infer that the Land of the Rising Sun is more in earnest now—and better prepared—than she was in 1913 to assert herself. She is more than ever conscious of her position and power among the nations.

Meantime, pending America's decision on the land-holding question, the highbrows of Japan are enlightening the people as to the situation. Former Premier, Marquis Okuma, is devoting himself to awakening the masses against "the unlawful attitude of California Americans," and, as a first step, called a meeting at his house of one-hundred prominent statesmen, diplomats, scholars, business men and financiers.

The Japanese paper, the *Asahi*, says the Marquis is condemning the indifference of the people to their interests, and quotes him of accusing them of becoming like the Chinese—weak and cowardly. "The will of the majority of the Japanese people must be ascertained," he declares. Should Japan back down on this grave question, the same state of affairs, in Okuma's opinion, would arise in Oceanica and Canada.

THE BENEVOLENT BILL- STICKER

By JOSEPH PENNELL

SPEAKING a year or so ago on the subject of War Memorials I expressed the hope that we could carry out in this country the system of the Romans when they conquered another land, or added a province to their Empire. They built to the utmost limit, or to the most important place in that country or compound province, a great road, and then they decorated it.

The same idea was carried out, not only by the Romans but by the French, under Napoleon, and my idea was that across this great land of ours, across which stretches the Lincoln Highway, that highway should be made not only useful but beautiful, that it should be decorated by memorials in exactly the same way that the Roman's decorated every road which ran from the Forum to the utmost confines of their possessions, that there should be on it, when you came to the top of a hill, beautiful seats, like the Romans built (you can see them at Pompeii), where the people who had climbed the slope could rest—and look away to great triumphal arches and viaducts and busy towns, to the distant hills crowned by memorials to the heroes who had won, or helped to win, this great but horrible war, that the roads too, should be broad and good—and the towns fair to look upon and live in.

That was my idea of what might be done on the Lincoln Highway from New York to San Francisco, but I woke up one morning and found that other people had other schemes. These are The Bill Stickers and we have got billboards from one end of God's country to the other, owing to the benevolent action of the billboard man.

For example, we have some most beautiful old wooden bridges in Pennsylvania. The only trouble about them is that you can't see the bridges for the signs. Our architecture and our art are being absolutely blotted out by the benevolent billboard man. Our stone bridges being useless for billboards are being blown up with dynamite and replaced by iron or concrete abominations.

If you travel further across the country, through the Alleghenies, you will come, above Altoona, to the Horseshoe Curve. Here is one of the most wonderful feats of engineering in the country, one of the most beautiful prospects, one of the most beautiful landscapes—it has been improved during the last year in the billboard fashion.

AN ABOMINATION OF BILLBOARDS

Not only that, not only have the billboard people taken up this idea of improving the landscape, but the citizens of Altoona think it is a very fine thing to welcome people to their city by enormous billboards. I can only say that I purpose never to go there, if I can help it again, or until they take down their billboards.

There are said to be signs of this sort in six thousand cities of the United States. Do you know, that our country, our beautiful country, has been stolen by the billboard man? And it is as great a crime to steal beauty as it is to steal cash. This beautiful land of ours has been taken over by a gang of thieves of beauty, and made into an abomination of billboards.

The land, too, is our temple, and when in the beginning of Christianity, Christ found the temple turned into a den of thieves what did He do? He scourged them out. Have *you* got the courage to scourge these thieves of beauty out of the land, out of our temple?

We are told that these benevolent bill-posters are doing good to the poor farmer, that they are enabling the poor farmer to make a little money. If you went and consulted the poor pickpocket, he would tell you that all he was out for, in picking your pocket, was to make a little money;

and so would the poor prostitute, and the poor gambler, and the poor everybody who is run in when you catch them. I regret that they frequently escape. But these bill posting people are not caught; nothing yet has been done to them; although laws have been passed against them, none of them have been enforced.

There is another side to this, the safety and decency of our roads. Quite recently the president of an automobile club said two or three things. One was that he did not, when he was driving his car, hope to have his tires smash, and then be told that he had better buy a tire he didn't want. The next thing was he thought it much more important that he should pay attention to a curve in a road, and not to a sign upon it. Then that it was necessary to see what was going to happen around the curve, and with a billboard in this position, he couldn't see.

In any civilized country in the world except this, and it isn't civilized, no such signs would be allowed to appear in any such places. These people who put up signs of this sort are worse barbarians than any of the Huns who lately invaded Europe. There is only one way to prevent it, and, before I refer to that I want to say that I have never seen a work of art, produced by a billboard man. This is the billboard advertising person's idea of what the United States of America, when it is entirely owned by the billboard man, will look like:—Signs are going to line the Lincoln Highway, and they are to be put upon standardized, sterilized and hypnotized art decorated machinery at the distance of fifteen feet apart, and you will be able to travel in perfect safety from New York to Chicago, and on to San Francisco, and see nothing at all except billboards all the way.

HOW TO STOP A BARBARIC CRIME

There is another thing that we have got to do to stop the work of these ingenious public benefactors and backers and supporters of chewing gum, cigarettes, smoking tobacco, and various other necessities upon which the American

public depends for its happy existence and the government says annually spends seven billion dollars for. It is entirely up to you, and the method of stopping this crime, this barbaric crime, this incredible vandalism, is to refuse to patronize every advertiser who uses a billboard! If you do that, the billboards will come down in a month. It has been done in England. In Great Britain, the Royal Automobile Club, finding that a certain tire company—these people love to be advertised—was putting up benevolent signboards, telling the people the direction from London to Newcastle, and also, incidentally, that they should buy *their* tires, the motorists told the tire company at a public meeting of the automobilists of Great Britain and Ireland that if those signs were not removed they would boycott them—and the signs came down. That can be done here and it has been done in the suburbs of Philadelphia—but not in the city where the mayor and the authorities could do it—if they dared. Instead more billboards have gone up in Philadelphia this year than ever and we have got a Mayor who talks and promises more than any we ever had, and what has he done?

Steps were taken before any laws were passed in Great Britain. At the present time, it is illegal to put up any signboards which obstruct the view, or deface the landscape in that country. It is civilized. How long is it going to be before we are?

I was asked not long ago to deliver a lecture in the University of Chicago, and just previously, Dr. Judson received a letter about me from a well-known firm which really wants to improve the whole of the country, naturally for nobody's benefit excepting ours. Dr. Judson was told that I was a most undesirable person to appear at the University. Now as the most important and the first patron of this particular billboard company is the Standard Oil, can you connect those two things—that the Standard Oil is or was that great benevolent millionaire, Mr. Rockefeller, and Mr. Rockefeller had more to do with building the University of Chicago than anybody else, and therefore, if Mr.

Judson, the President of Chicago University, couldn't connect it, well, maybe somebody else could. The answer that Dr. Judson had the courage to make was to turn the letter over to me.

ARE WE LIVING IN A FREE COUNTRY?

Do you think we are living in a free country? This is a country of pirates, and nothing else, and the pirates are the billboard men. They have boarded the land.

All this came, however, from the work that we artists did freely during the war for the Liberty Loan posters. We wanted to get money for our Government, and we did put posters everywhere. I regret many places where they were put. The men who put those posters up, who engineered the scheme, were the dollar-a-year billboard advertising men. And when the Armistice was signed, and the Committee on Public Information was demobilized, the billboard advertisers kindly took over the billboards, and, instead of putting patriotic appeals on them, replaced them with boosts for cigarettes and chewing gum.

The thing is not going to be so easy, however. I do not know whether it is generally known, but the Secretary of Agriculture who has just been chosen by the President of the United States as a member of his Cabinet is, or was, the President of the National Billboard Association of the United States. We have got to fight the Cabinet, and we have got to fight Washington, and we have got to get some brains into the heads of the different departments of the United States Government at Washington. Soon we shall have a change at Washington. They settled the matter years ago in Colorado. Signs were painted on the cliffs and the canyons—and when a bill was introduced to prevent it, the bill was laughed at till the Representative who introduced it said: "You have two things to sell in this State—silver and scenery. Are you going to stop the sale of the latter by stopping tourists to the State?" The signs came down; the bill-stickers were made to take them down.

ART IS COMMERCIALIZED

These bill-stickers now think they own the land, because they have bribed the farmers to let them put the boards up. That, they tell us, is not illegal, although any number of legal decisions have been rendered against it. They admit, themselves, that the billboards are not quite the things of beauty they once thought, and they are going to improve them. The artists in this country who have made murals and decorations for various public buildings are to be employed, and they have been commissioned to produce murals to line our roadsides. In the old days the mural painters showed their paintings by the roadside, in the form of Stations of the Cross, or about a Shrine. Now the artists of this country, instead of being asked to do work of that sort, these great, and good, and noble mural painters—are going to be employed to advertise pills and piffle.

That is the sort of thing which in this country has taken the place of religion. We are out for all we can get, and the billboard people are going to get all they can, just as fast and as quick and as soon as they can.

In reply to a letter I recently received, enclosed with a petition that I would draw for the billboard people, I told these advertising agents that I was perfectly willing to draw for the billboard association, if they would put two extra 0's on to the figure they offered me, and if they would also agree to pull down every billboard in the United States, over which they had control. I have had no answer yet from them.

I happen to know, however, that at least four or five eminent painters, eminent artists, decorators, and mural painters have been approached. What answer they gave the bill-stickers I don't now. But this is a paragraph in the letter: "While conditions are prosperous now, the time is not far distant when the Excess Profits Tax Law will be repealed, and a possible tax imposed upon national advertisers by the Federal Government, that advertising corporations will be speedily and materially reduced in size."

They are getting scared themselves, the bill-stickers. These people are paying no taxes, no rates; they pay a rental only to the farmer, house or ground owner. They are paying no taxes, while we are being taxed out of existence, and if these people are putting, as it is said, their excess profit tax into advertising they are defrauding the United States Government. Every piece of ground which carries a billboard should be taxed as occupied land.

In Chicago, at the present time, they are completing their beautiful boulevard—Michigan Avenue. One end of it is decorated with an advertisement for . . . Tires, which you can't escape by day, and which glares at you by night. At the other end, when I was there only a few weeks ago, a new sign board was going up. That is the way Chicago is being improved, boosted!

OUR IDEAL METROPOLIS

You can imagine the ideal metropolis we are going to have. You can see it anywhere, don't flatter yourselves! On Fifth Avenue, between the Metropolitan and 120th or 130th Streets, you will see a crop of these things which are perfectly magnificent. I noticed that in front of Senator Clark's palatial mansion were a couple of signs telling him what kind of cigars he should smoke, and what gum he should chew, and this is what Mr. Carnegie used to gaze upon. If I were Senator Clark, I should see that those things came down tomorrow; and it is the duty of the citizens of New York to see that they do come down.

There is another side to it. In the papers, Mr. Davison has been appealing for money to save the starving inhabitants of Middle Europe. Is any one aware that the lumber wasted on these signs would rebuild the whole of devastated Europe—that the paint squandered on them would repaint the whole of it? Does any one know that the iron work would greatly help to rebuild the mills and the factories, and that the money that has been wasted and the land that these billboards stand on would feed the whole of Europe today? Is anyone aware that to make these

billboards our national forests are being destroyed? The lumber is wanted to build billboards and make pulp to print ads on—hang the artists, hang beauty, hang everything, so long as the billboard man can make money! Making money is the whole aim and object of nearly all the great mass of the people in this country.

There is another aspect to it: The papers will do nothing, or scarcely anything, because the papers have been threatened. The public press of this country has been threatened with the fact that if they say anything against billboards, the advertisements will come out of their papers. I wonder how long it will be before we get a paper in the United States with the courage of the London daily, which received a letter, before the British law went into force? The editor of the paper took the advertisement out, and published the threatening letter. They begged to have that advertisement put back, but the proprietors of the paper refused to put it back till the bill-sticker learned his lesson.

Hardly one great advertiser who uses the public press for advertisements, uses a single billboard. John Wanamaker, the biggest advertiser in the United States, will have nothing whatever to do with billboards; he has testified to it in a public letter.

These people have only started, they have only touched the fringes of their opportunities, but when they get really going, the whole of the lower part of New York City is going to be covered with advertisement of pills, piffle, cigarettes, and chewing gum.

At Fifth Avenue and 42d Street, New York, buildings have been completely covered up, and the light all blocked out, for the benefit of some canned music concern. I don't see why they shouldn't advertise it in a proper form, but that concern has a billboard up at Harmon, or near there, on the Hudson, which I think is nearly seven hundred feet long. It looks to me as though they have taken some of the background of Fort George and put it up there, and doesn't it improve the landscapes—is not the billboard an improvement on nature!

As I said, I do not object to proper advertisement at all. The kiosk is a form of advertisement, and that form of advertisement exists all over Europe. Advertising of a proper sort done in a decent fashion is perfectly legitimate, but the seizing of the whole of the United States, and dedicating it to the use of a gang of, as I say, barbarians and vandals is a crime no other country would permit.

MUSEUMS AND BILLBOARDS

A nation which will stand for it, and people who will take that sort of stuff seriously are beyond belief. We have heard a great deal about the effect of the Museum on the child, but for every child who is bribed to come into a Museum and look at pictures it doesn't understand, and cares mighty little about, unless it is really rightly taught to do so, there are one hundred thousand children who see these abominations all day and every day! It is on this sort of thing that the taste and the culture of the American public is being formed. I heard the other day that the question was asked of a number of children brought into a museum, what they thought of it. They said they didn't like the pictures, because they weren't like "Bringing Up Father," "Mutt and Jeff," and the "Gumps." That is exactly the child's idea; that is what the average American child's idea of art is today. And the children didn't want to read books, because they didn't have to read the movies. Those are the aims and ambitions, and the ideals of infant America.

I do think and cannot help thinking that it is almost time some museum directors went a little bit outside of the doors of their own museum; and although we have heard the effect that the museum had on twenty thousand school-children of Toledo who visited it, I should like to know what the other two hundred thousand are doing who have never been in it or heard of it.

It may be said that billboards have no real effect on the cultured classes. A graduate, I believe, of Bryn Mawr College, in order to get money for the Bryn Mawr College

Drive, in cap and gown, made friends in some way, probably through a bill-posting man, with the Philadelphia city authorities. She entered Independence Hall, our most sacred shrine. She brought along with her a photographer; she got the better of the editor, proprietor, and publisher of the *Philadelphia Ledger*, and her picture, sticking bills on the base of the Liberty Bell, was printed in an issue of the newspaper. That shows the effect on the cultured classes of the bill-poster. I had been asked in the meantime to deliver a lecture before the Art Club of Bryn Mawr, and before I did it, this came out. I wrote to Miss Helen Taft, the acting President of the College, and said I should not put my foot inside of Bryn Mawr College unless that person, if a pupil, was publicly reproved, or if a graduate, her degree taken from her. I have had no answer from Miss Helen Taft. The approach to Princeton is fouled in the same fashion.

HOW TO STOP THE BILLBOARD DEBAUCHERY

You may say that I have only been destroying the billboards. I hope I have. I hope I have made it plain that that is exactly what we have got to do to stop this curse, this debauchery, this debasing and defaming, and ruination of the beauty of our country. The advertisers may defeat their own ends for they do not encourage the public that cares to purchase articles advertised on billboards that destroy the beauty of this country.

But we have got to adopt the French system. We can't do this all at once, although we can commence this refusal to buy of advertisers today. We have got to get the French law adopted here. Every advertisement in France is taxed; and, as I have said, here there is no tax on any of these billboard monstrosities. And that tax in France increases by the square inch or meter, and it increases at such a rate that nobody can afford to put billboards up.

Another detail is that a day or two after, I am informed—I may not be right as to the dates—of the signing of the Armistice, Messrs Cusack & Comany sent over crews of

billboard men to capture France. They haven't captured France yet.

And I have been asked if I prefer empty lots decorated with rubbish, to those decorated with billboards—I would only say both should be suppressed—and would be if this country were governed and not the prey of any one who has a scheme for making money out of it. A resolution was passed at the recent Convention of Women's Clubs condemning billboards, and advocating legal measures for their removal.

But the important thing that I wish to bring out is this: The time has now come for this country not to funk the subject of most importance, the most vital one, which would control the whole thing—the creation of a Department of Art—but to go to work and send a strong petition to the Government, and a strong demand that such a department of Art be created at once. And if we do that, we shall get Government support of Art, and we shall get rid of the billboards.

THE FEDERAL RESERVE ON TRIAL

By W. P. G. HARDING

[Governor of the Federal Reserve Board.]

THE Federal Reserve System is now passing through a crucial stage of its existence. Despite the publicity which has always been given to its operations from the beginning and the efforts that have been made to explain the principles and objects of the Federal Reserve Act, there is still a wide-spread misunderstanding of the functions, policies, powers, and limitations of the Federal

The fundamental objects in establishing the Federal Reserve Banks were "to furnish an elastic currency, to afford means of rediscounting commercial paper, and to establish a more effective supervision of banking in the United States." The experience of the past four years has demonstrated the expansive power of the Federal Reserve System, but an elastic system of Federal Reserve Bank credit and note issue implies capacity to control and power to curtail as well as to expand. The ability of the System to check undue expansion and to induce normal and healthy liquidation is still on trial.

The enactment of the Federal Reserve law and of its various amendments and the operation of the Federal Reserve Banks have brought about changes in our banking structure hardly less marked than the economic changes that have been caused by the World War. Cash in vault and balances with banks other than the Federal Reserve Banks no longer count as lawful reserve for the member banks of the Federal Reserve System:—their entire re-

serve must now be carried with the Federal Reserve Banks. The lending power of the member banks has been greatly increased because of the substantial reduction, in more than 50 per cent, in the reserve they are required to carry and because of the phenomenal growth in their deposits, without taking into account the greatly extended rediscount facilities afforded them by the Federal Reserve Banks and the power given them in the Federal Reserve Act to lend their credit by accepting drafts drawn upon them in domestic transactions involving the shipment of goods and in transactions growing out of importations and exportations. No one has denied that our old banking system, with the rigidity of its currency and with the limitations upon its rediscount facilities, would have collapsed under the strain which would have been imposed upon it by war conditions. Even had there been no war, the old system would have been unable to respond to the business requirements of the present day.

A GOLD RESERVE ESSENTIAL

The Federal Reserve Banks, as the custodians of the ultimate banking reserves of the country, as the mainstay of the acceptance market, as the agencies of last resort in the matter of rediscounts, and as the media through which so large and important a part of the currency is issued, must always be kept in an absolutely sound and strong position. Their strength must be measured by the liquidity and intrinsic value of their invested assets, which include rediscounts for member banks, as well as by the proportion of gold and lawful money to their liabilities. A gold reserve is essential to a sound financial system. This percentage of reserve ought normally to be considerably higher than the minimum required by law, in order to provide ample margin for meeting unusually large seasonal requirements and unexpected emergencies, but even though the reserve should fall temporarily below legal requirements, there would be no occasion for uneasiness provided the assets of the banks are of the self-liquidating charac-

ter which would admit of the restoration of the reserve within a reasonable time. It would be folly to inflict serious injury upon agriculture, commerce, and industry merely for the sake of maintaining an arbitrary minimum reserve, but it would be still more consummate folly to treat a low reserve position, brought about by an emergency, as a normal base from which future emergencies are to be met.

The average reserve now required of all national banks is about 8 per cent of their net deposits. As this reserve must be carried with the Federal Reserve Bank, it will amount to 8 per cent in terms of gold and lawful money, only when the reserve of the Federal Reserve Bank is 100 per cent of its liabilities, and it is reduced, *pari passu*, as the reserve of the Federal Reserve Bank declines.

The law fixes the minimum reserve to be carried by Federal Reserve Banks against their note issues at 40 per cent, and against their member banks' deposits at 35 per cent. It permits temporary suspension by the Federal Reserve Board of these minimum reserves under certain graduated penalties, but in order to illustrate the danger of regarding the legal minimum as the normal base from which to operate, I should like you to consider what would be the outcome if we had to meet another emergency such as war, with Federal Reserve Bank reserves at their present level. When a state of war was declared on April 6, 1917, the combined reserves against deposits and note issues of all Federal Reserve Banks averaged 84.7 per cent. Due to this condition the United States was able to meet all financial obligations incurred without any impairment of its own ability or of that of the banks to redeem currency in gold, thus preserving the parity of all forms of money in circulation. This was an achievement impossible of accomplishment during the Civil War, when current prices were quoted in terms of irredeemable paper money, which was not brought back to a parity with gold until fourteen years after the close of the war.

Early in January, 1919, shortly after the Armistice, the

combined reserves of the Federal Reserve Banks was 51.3 per cent, showing a diminution of 33.4 per cent from the date of our country's entry into the war. The gold embargo was removed in June, 1919, when large amounts of gold held for foreign account were released. Even after this the reserves stood at 51 per cent on September 26th, after which date they showed a steady and continuous decline to 44.8 per cent at the close of the year.

EXTRAVAGANCE AND ABUSE OF CREDIT

During the last six months of the year 1919, tendencies towards unrestrained extravagance and abuse of credit were manifest all over the country. It became evident that the rediscount facilities of the Federal Reserve Banks were being used too freely and that unless corrective measures were applied the situation would become exceedingly dangerous. The rediscount rates of the Federal Reserve Banks were much below the market rates for money, thus affording member banks an opportunity for profit in their rediscount transactions, and making it exceedingly difficult to keep in check borrowing demands made upon them. The Federal Reserve Board and the Federal Reserve Banks, while recognizing the necessity of holding these dangerous tendencies in check by means of a reasonable and effective control of credit in order that its flow might be once more regulated and related to the economic welfare of the country and the needs of its producing industries, were reluctant to take any precipitate action. It was realized that productive industries are profoundly affected by credit conditions, that modern business is done on credit and that the mood and temper of the business community are deeply affected by the state of credit and may be easily disturbed by ill-considered or hasty action. The test of the functioning of a credit system must be found in what it does to promote the production and distribution of goods. It is well understood that too rapid or too drastic deflation would defeat the very purpose of a well regulated credit system by its unsettling effect upon productive indus-

try. On the other hand, over production at high cost on expanded credit would be a grave menace. The Federal Reserve authorities recognized the importance of avoiding extremes and their energies were therefore directed more particularly to the prevention of further expansion for non-essential purposes and to the gradual and orderly liquidation of non-essential loans. The predominant idea was not necessarily to reduce the loan accounts of the banks of the country but to bring about such a readjustment in them as would ultimately lead to a restoration of a proper balance between the volume of credit and the volume of concrete things, which credit helps to produce and which are the normal basis of credit. The Board believes that this equilibrium can be restored only by speeding up the processes of production, by the orderly distribution of goods, by the avoidance of excessive consumption and by the increased accumulation of savings.

OUR CREDIT SITUATION NOT ALARMING

On several occasions, before changes were made in the discount rates of the Federal Reserve Banks, the Federal Reserve Board brought these matters to the attention of the public with a view of testing thoroughly the theory that the credit situation could be controlled without advancing the discount rates of the Federal Reserve Banks. But because of the exhaustion of capital throughout the world and of the universal demand for credit, it soon developed that this was impossible. Rates were advanced slightly during November, 1919 and again on January 23, 1920, approximately to their present level. The rates established, however, were still considerably lower than current market rates. It became evident early in the spring that no reduction in the total volume of loans was taking place, and that unless a more discriminating judgment was used by member banks in granting accommodations, the country would be confronted with a real crisis during the crop moving period, into which we have now entered.

At a conference held last May between members of the

Federal Reserve Board, members of the Federal Advisory Council and the Class "A," or banker, directors of the Federal Reserve Banks, there was an exhaustive discussion of the banking and financial situation. In presenting to the conference an outline of the Board's views, I pointed out that since June 30, 1914, there had been an expansion of banking credit in the United States, properly attributable to the war, of \$11,000,000,000, and that during the same period there had been an increase in the volume of money in actual circulation of about \$1,900,000,000. When it is considered that our Government during a period of three years floated \$26,000,000,000 of securities to meet war requirements, the credit expansion which had taken place could not be regarded as excessive or alarming when viewed from the standpoint of war necessity. Attention was called however to the continued expansion which had taken place since the flotation of the Victory Loan in May, 1919, in the face of a decreased production of essentials.

THE BOARD'S VIEWPOINT

In order that the Board's viewpoint of some of our major problems last May may be understood, I shall quote from the statement presented to the conference:

"It is this tendency of production to decline, particularly in some essential lines, which constitutes a very unsatisfactory element in the present outlook. It is evident that the country cannot continue to advance prices and wages, to curtail production, to expand credits and to attempt to enrich itself by non-productive operations and transactions without fostering discontent and radicalism, and that such a course, if persisted in, will eventually bring on a real crisis.

"The fact must be recognized that however desirable on general principles continued expansion of trade and industry may be, such developments must accommodate themselves to the actual supply of capital and credit available. Every effort should be made to stimulate necessary production, and to avoid waste. War waste and war financing result inevitably in diminished supplies of goods and increased volume of credits.

"Our problem, therefore, is to check further expansion and to bring about a normal and healthy liquidation without curtailing essential production and without shock to industry, and, as far as possible, without any disturbance to legitimate commerce and business.

"Regardless of the extent of its legal powers, it would be a most diffi-

cult task for the Federal Reserve Board to attempt by general rule of country-wide application to distinguish between 'essential' and 'non-essential' loans. During the war there was a broad underlying principle that essentials must be 'necessary or contributory to the conduct of the war,' but notwithstanding the sharp outline of this principle much difficulty was experienced by the various war boards in defining essentials and non-essentials. It would be all the more difficult for the Federal Reserve Board to make such a general definition now when there is no longer that purpose as a guide. . . .

"On the other hand, there is nothing in the Federal Reserve Act which *requires* a Federal Reserve Bank to make any investment or to rediscount any particular paper or class of paper. The directors of a Federal Reserve Bank are, however, required by law to administer its affairs 'fairly and impartially and without discrimination in favor of or against any member bank,' and subject to the provisions of law and the orders of the Federal Reserve Board to extend 'to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks.' Thus the directors of a Federal Reserve Bank have the power to limit the volume and character of loans which in their judgment may be safely and reasonably made to any member bank.

"It is the view of the Board, however, that while Federal Reserve Banks might properly undertake in their transactions with member banks to discriminate between essential and non-essential loans, nevertheless that discrimination could much better be made at the source by the member banks themselves.

"It is true that under existing conditions the volume of credit required in any transaction is much greater than was the case in pre-war times, but it is also true that the resources of the member and non-member banks would be ample to take care of the essential business of the country and to a large extent of non-essentials as well if there were a freer flow of goods and credit. If 'frozen loans' were liquefied, and if commodities which are held back either for speculative purposes or because of lack of transportation facilities should go to the markets, and if large stocks of merchandise should be reduced, the resultant release of credit would have a most beneficial effect upon the general situation. In the meantime everything must be done to expedite the release of these credits and to restrict non-essential credits in future.

"While the problem of credit regulation and control is national and even international in its scope, yet in the last analysis it is merely an aggregation of individual problems, and the proper working out of the situation must depend upon the public and upon the banks which deal with the public. The public should realize the necessity of economy in expenditures and in consequent demands for banking credit. The banks themselves are best able to impress the importance of this policy upon the public, and both must do their part in accelerating the processes of production and distribution and in restricting waste and extravagance."

BOARD'S POLICIES APPROVED

The policies outlined by the Board have, generally speaking, met with the approval of solid banking and

business sentiment, and there has been since last spring a marked improvement in the credit situation. This is due to the better character and greater liquidity of bank credits rather than to any actual decrease in the volume of credit. As a matter of fact, the expansion in loans and currency during the past twelve months has been greater than for any like period in the history of the country with the single exception of the period between September, 1917 and September, 1918, when we were in the midst of the war.

It is known that as a direct result of the discount policy of the Federal Reserve Banks there has been a very large decrease in the amount of speculative and non-essential loans, and it is believed that the increase in the loan account of these reporting member banks has been due largely to a response to legitimate agricultural, commercial and industrial requirements.

The rapid expansion in loans which is just now taking place is due, undoubtedly, to crop moving requirements.

With the exception of New York all of the borrowing Federal Reserve Banks are located in agricultural sections. The Federal Reserve Bank of New York is the greatest single supporter of the acceptance market and it is known that member banks in New York City are lending heavily just now to country banks in the farming sections. Consequently it is not overstating the case to say that all of the Federal Reserve Bank inter-bank borrowing is for crop moving purposes.

Speaking for myself personally, I desire to say, however, that I am a firm believer in gradual and orderly methods of marketing our great agricultural staples. Agriculture is the most important of all industries, for upon its fruits depend the lives of those engaged in all other industries. The farmer is a great consumer of manufactured products and anything that affects his buying power is soon reflected in the business of the merchant and the manufacturer. While the individual farmer may be just as well off with small production and high prices, the mass of the population is far better off with full pro-

duction and moderate prices. But farming as a business must be remunerative or production will languish. It is, therefore, important that the efforts of the farmer be supported and stimulated, that he be aided in preserving the full measure of his harvest and that he be afforded an opportunity of marketing his products on terms sufficiently profitable to warrant his staying in the business of farming.

OUR CROPS MUST BE MARKETING PROPERLY

Great staple crops, the production of which extends over a period of several months, must meet the requirements of consumption for a full year and in order to prevent possibility of shortage it is desirable that there be a reasonable surplus held over from one crop pending the marketing of the next. The gradual and orderly marketing of our great staple crops is, therefore, a matter of importance both to producer and consumers. The dumping upon the market within a short period of time of a large part of a crop, consumption of which extends throughout the year, means not only a loss to the producers, often to those who can least afford it, but involves also a great strain upon our transportation facilities and upon the banks in providing the funds necessary for large purchases in advance of actual requirements for consumption. Dumping of farm products promotes speculation and usually results in higher prices to the ultimate consumer. Farm products, however, should not be hoarded or held back from the market by use of credit merely in the hope of forcing prices up to an artificial level. It is estimated by some that the value of this year's staple crops will be around \$22,000,000,000, and it is manifestly impossible for any banking system to provide funds to withhold these staples entirely from the market. What is needed is an open market in which the law of supply and demand is given free play and in which buyer and seller may meet on equal terms.

A WORLD-WIDE DEMAND FOR CREDIT

There is a world wide demand for credit. There are nearly \$25,000,000,000 of Liberty Bonds, Victory Notes and Treasury Certificates outstanding. Promissory notes secured by any of these bonds or notes of the United States are eligible for discount at the Federal Reserve Banks. A low rate of discount at the Federal Reserve Banks would attract heavy offerings of paper secured by these obligations, the proceeds of which could be used for any purpose and the result would be that pressure on member banks for loans of this character would be greatly increased, and the lending power of the Federal Reserve Banks absorbed by non-liquid loans in a very short time. The Federal Reserve Banks would then lose their ability to accommodate commerce and business.

Interest rates are, in the last analysis, governed by the time honored law of supply and demand. As the demand for credit becomes less acute and as the supply of loanable funds increases, interest rates will fall. Do not understand me, however, as attempting to justify any effort to keep the general level or rates above the Federal Reserve Bank discount rates, for when our banking system reaches the point where it can function normally the Federal Reserve discount rates ought always to be somewhat higher than the current market rates.

In conclusion I would say that the Federal Reserve System is still confronted with conditions more or less abnormal, but we have passed through the period of exhilaration or intoxication which characterized American business activities several months ago, and notwithstanding the gloomy predictions which were frequently made at that time the transition to a more normal basis is proceeding quietly and without alarming features. Credit which is required for seasonal needs is being granted, and business generally is looking forward to a Fall and Winter of at least average activity. Sentiment is being helped by the bountiful harvests, by the better outlook for the rail-

roads and by the knowledge that many highly essential developments which have been long deferred by force of circumstances, such as enlargement of our transportation facilities and additions to housing accommodations throughout the country, must soon be undertaken. A broad demand, which will probably extend over a period of years, is opening up for the products of our basic industries, and if in the readjustments ahead of us, any lines of business should prove to be overdone, there is every assurance that any surplus of brains and energy now engaged in such lines can be readily utilized in other fields of activity.

We have problems confronting us and we shall always have them: but, as always in the past, we can cope with them successfully if we approach them with a spirit of confidence and selfreliance tempered with common sense.

OUR VANISHING COAL AND OIL

By EDWARD G. ACHESON, Sc. D.

[*Past President, American Electrochemical Society*]

OF THE many natural resources that enter into our private and national lives, those that are essential to the production of mechanical power are, perhaps, the most valuable. The standing of a nation may be measured by the amount and availability of power-producing resources possessed by it. The present commanding position of Great Britain is largely due to its coal resources.

Our country was liberally supplied with both exhaustible and inexhaustible natural resources available for producing power, but we have been using and exploiting the exhaustible ones in a wasteful, reckless manner and the time has now arrived when our national sufficiency requires that we think seriously of this matter and take stock of our remaining supplies. Dr. George Otis Smith, Director of the United States Geological Survey, recently made this statement: "And even though the United States may today be the largest oil producer, and though it consumes nearly 75% of the world's output of oil, it is not a minute too early to take counsel with ourselves and call the attention of the American geologists, engineers, capitalists and legislators to the need of an oil supply for the future."

For many years we have been the great petroleum producer. The world could not have progressed as it has during the last fifty years had it not been supplied with American petroleum. At home these oils have enabled us to develop agriculturally, industrially and in many other ways in a marvelous manner. Let us now awaken to the fact

that unless something revolutionary occurs, all this will be changed.

Sir E. Mackey Edgar, an English authority, recently made this statement: "In ten years' time America will be forced to buy annually from Great Britain 500 million barrels of oil." This is a most startling prediction, and, if it be fulfilled, might spell disaster to many of our interests—hence we must examine the facts and see if it is likely to occur.

OUR PETROLEUM SUPPLY AND DEMAND

In my own efforts to do this, I have gone over the figures showing the petroleum marketed during the last forty years and have found, in round numbers, as follows: in 1878 the consumption of petroleum was 15 million barrels; in 1898 it was 55 million and in 1918 it was 350 million barrels. From these statistics we learn that the consumption during the twenty years, from 1878 to 1898, increased 266 per cent and that during the next twenty years the increase was 536 per cent and if we assume the increase continues for the next ten years at the same rate as it occurred during the last twenty years, it will have increased 268 per cent over the figures for 1918 by the year 1928, which would make the consumption no less than 938 million barrels. It may be said this amount will not be required in the United States as foreign countries will be producing their own oils; but it is quite certain that the increased use of petroleum as a substitute for coal in producing power for vessels and manufacturing plants will fully make up and more than make up for the lost foreign trade.

We shall not be able to meet these demands with natural petroleum taken from the ground within the confines of the United States, for even now we are importing large amounts of oil from Mexico. If we should buy all this oil from Great Britain, that Sir E. M. Edgar speaks of, it would cost us sums that would be expressed in billions of dollars, and we should very quickly lose all we have gained by exploiting our own petroleum. It should seem that Sir

E. M. Edgar's prediction would come true unless we do some things we are not now doing.

There are possible ways of avoiding this calamity. The immense oil shale deposits in our Western States form a source of supply of petroleum, but unfortunately, there are great difficulties to overcome in their utilization. A ton of shale would yield approximately one barrel of oil, hence 938 million barrels of oil per year would require the working up of 938 million tons of shale each year, and this is well nigh twice the amount of coal mined in the United States in one year. All this shale would have to be retorted to distill off the oil, and it is difficult to believe this possible, and certainly it is not possible within the ten years, and probably not in twenty. We have not the man power to do it with, and in the meantime we are rapidly approaching the exhaustion of our natural petroleum.

SITUATION VERY SERIOUS

Certainly this whole situation has a serious aspect, but I think we can find a favorable solution. Petroleum is a compound of carbon and hydrogen in about the proportion of eighty parts carbon to twenty parts hydrogen. The carbon and hydrogen in this shale as mined from the earth have not yet united to make petroleum, but the simple act of heating the shale causes them to combine and form petroleum which can be distilled off. It would be belittling man's mental power to assume he cannot learn how the carbon and hydrogen are associated in the shale rock and be able artificially to produce this combination in such quantities **as he desires**. Carbon and hydrogen are elementary substances to be had, the carbon from our coal, even of the lowest grade, and the hydrogen from water, and we may consider them inexhaustible. This problem can, and undoubtedly will, be solved by some one of our 15,000 or more chemists, but it is, in fact, a national problem, and could come under Government supervision. It would well justify the offering and payment of a handsome reward for its early solution. A thorough study of oil shale rock

should show the way to the manufacture of petroleum, and I have been advised by Dr. Victor Alderson, President of the Colorado School of Mines, that he would be pleased to furnish samples of oil shale rock to any investigator who would ask for them.

The solution of the problem of producing petroleum artificially would result in our having three sources of supply, namely, the natural petroleum as it is now taken from the earth, the petroleum to be obtained from the oil shale desposits in the West and the synthetic or artificial production, and all of these would be within our own country, a condition much to be desired. These three sources of supply could be made to meet our future requirements.

OUR WASTE OF COAL

Let us now consider the conservation of our coal resources. There are very few of the conditions or acts pertaining to our present way of living, requiring the use of coal, that could not be equally well done with electricity generated by water power. Immense quantities of coal are burned up to produce steam used in generating power, all of which could be equally well done with electricity. It may be possible it would cost fully as much to produce the power from our water resources as it now does from our coal resources, but we would have the advantage of conserving our exhaustible coal resources. However, even if our best efforts were put forth, a very long time would be required to develop our water powers, and in the interval all possible should be done to conserve the coal. It is generally understood that about 15 per cent of the value of the coal is delivered in mechanical power, the remaining 85 per cent being lost beyond recovery. Were this coal made into coke, and the carbon of the coke united with hydrogen to form an oil, we should have a liquid fuel that would have the advantages over coal of easy handling, less volume, increased cleanliness and, above all, a great decrease in the amount of coal consumed for a given amount of power developed.

Having consumed our valuable oil or coal with the great losses entailed in making mechanical power, what do we do with the power? We have gone to all this expense and great labor to produce the power with which to do certain work, but do we use it as intended? A portion of it, yes, but at least one-half of it is lost as useful power due to the friction in the bearings and moving parts of the machines. The losses due to friction in railroad operation are still greater. Leonard Archbutt, an English authority, says, "It has been estimated that the total horsepower of all the steam engines at work in the United Kingdom in 1905 was not less than ten millions, and that considerably more than half this enormous amount was consumed in overcoming friction." This means that approximately one-half of the coal burned to produce power is lost—hence we are utilizing about one-half of the 15% of the energy of the coal or oil we consume for power purposes. It has been proved in a number of tests that these losses due to friction can be reduced 30% and, under favorable conditions, this might be carried up to 50%. This remarkable result can be accomplished by the scientific use of graphite. This graphite, by the way, is also carbon, so here we have carbon in one form conserving carbon in another.

You may ask why we need to worry about the future of our coal as we have untold quantities. True, we have vast amounts of coal, but much of it is of very poor quality and the Government experts warn us that fifty years may see the exhaustion of the best grades. These good grades should be conserved for the making of coke with which to reduce our iron ores, as coke suitable for use in a blast furnace can not be made from coal of poor quality.

OUR HOPE LIES IN SYNTHETIC WORK

I have endeavored to thus put before you a few examples of what appeal to me as important steps in conservation that must be taken if we wish to escape dependence upon others, and to have within ourselves resources essential to our national growth. If it be our desire, and undoubtedly

it is, to lead in the industrial advance of the world, we should understand this advance will be made as a result of the scientific use of resources and opportunities. We have become great and wealthy as the result of the intelligent use of our natural resources, but our future will largely lie in synthetic work—putting together, building up—not taking apart or tearing down, as we have been doing with Nature's structures as we found them in the abundant mineral and other natural resources of the country. Those natural resources that give promise of early exhaustion should be taken care of first. Our scientific men should devote their energies to either artificially prolonging the lives of these resources by the synthetic production of more of them, or **creating satisfactory substitutes.**

The possession by our citizens of natural resources in foreign countries is certainly better for us than to be wholly dependent upon foreign people. Nevertheless, they might prove to be untrustworthy sources of supply in a time of great need. The secure, and much to be desired way is to have our resources within ourselves, free from any external interference. To accomplish this it is necessary that the people at large be made acquainted with these facts and an enthusiasm be created throughout the country, and more particularly in the ranks of our chemists, engineers, capitalists, legislators and others who can contribute to the desired ends. Let us hurry and put to work our idle water powers that we may the better conserve our exhaustible resources and continue to hold our dominant position as an industrial people. After all, the intelligent, scientific use of our natural resources should precede the synthetic production of substitutes.

THE RELIGION OF AFRICAN CANNIBALS

By PROF. RICHARD L. GARNER

[Director of the Smithsonian Institution's Recent Expedition to the French Congo.]

MY chief hunter or "shoot man," Donga Njango, belonged to the most incorrigible tribe of cannibals in the world. They are the Pangwes and they occupy sixty thousand square miles of African bush, jungle, and swamp land. Why did I have a cannibal? Because his courage was superb. He feared nothing of flesh and blood, man or the wildest animal of the jungle. It was Donga's boast that he was afraid of nothing and during the twenty-odd years that he worked for me, I do not recall his ever having met a tight situation with anything but stark courage.

He came from a race of fighting men. The Pangwes do not fear the well-trained soldiers of France any more than they fear the beasts of the wilds. Time and again they fought off the French Colonial troops and to my knowledge these cannibals are the only tribe in Africa whom a European nation has not been able to subjugate completely. Some idea of them may be gained from the way they used to settle disputes. When they wished to settle a point with their kin of a neighboring village, they did not descend upon that village and wipe it out, which they could easily have done, calling upon their great reserves of numbers. Instead, they showed a sense of fair play, which contrasts oddly with the policies of some of the more civilized nations of Europe. The Pangwes told the weaker village to choose a number of fighting men, say twenty. Then the Pangwes

chose twenty men. These constituted the "armies" that were to settle the dispute. Both "armies" then repaired to an island in the river, set their canoes adrift, completely cutting themselves off from any assistance, and went to it.

One "army" worked up from one end of the island, and the other, from the other end. They hunted each other down through the trees and fought until all but one man was killed. The tribe to which this sole survivor belonged was the victor, and to it belonged all the dead on the island. The victorious tribe then carried off the dead, friend and foe alike, and feasted for eight to ten days. The French did succeed in putting a stop to this custom of fighting among the various Pangwe tribes in order to get dead to eat, but it never succeeded in stopping cannibalism among the Pangwes. The French merely did what they could to cut down the source of supply.

The cannibals care very little about sons, although they raise them. They like to have daughters because they can sell them. All of the daughters of Pangwes are sold when they are quite small children. The purchaser agrees to pay a certain price for the girl when she is old enough to marry, generally putting down something to bind the bargain. Originally, girls of very good class among the Pangwes were sold for a "bundle" each, which represents about \$30. A "bundle" consists of several pieces of cloth, a flint lock gun, three or four axes, or big knives, a keg or two of powder, and some beads and various other articles of trade. But the high cost of living has made itself felt among the Pangwes, and today among the cannibals of the interior girls are now sold for three or five "bundles."

These cannibals are the greatest hunting tribe in central Africa. Elephant hunting is made much of with them. Everybody goes, men, women and children. The cannibals build a corral along an elephant trail, leaving an opening at each end. Then they lie in the bush and wait. As soon as the elephants enter the corral the Pangwes shut the gates at either end and, jumping into the enclosure, kill the elephants with spears and flint lock guns. It is a rule of the

tribe that no one is allowed to take away any meat until every elephant has been killed.

A Pangwe never thinks further than tomorrow; with enough to satisfy his hunger, he is quite content. His ambition is to have several wives so he can have children to sell. With the money he buys rum, cloth and as much powder for his old flint lock gun as the French will let him have—which is little more than a pound a year.

AFRICAN NON-BELIEF IN A DEITY

Of all subjects of great human interest about which civilized men know the least, perhaps, is that of the true inwardness of heathen institutions; and of all the tomes of modern literature bearing upon that subject it is seldom that one finds a chapter that gives a fair interpretation of them. It is not my purpose to defend the morality of paganism as a system of ethics; but to point out the lack of immorality in certain ceremonies which have been condemned as vile superstitions by people who do not know their meaning. That they are superstitious is not denied; but it does not, of necessity, follow that they are vile or vicious. It is often asserted and is very widely accepted as true, that all races and tribes of mankind believe in a deity of some sort and have some form of worship; but the statement is not quite true.

So far as I have been able to analyze the indigenous institutions of the cannibal and other tribes of tropical Africa, during a sojourn of some twenty-seven years among them, there is no belief in anything having the attributes or functions of a deity. During the past century white men have created a substitute for a divinity under the native compound term *Anyambie*; but the being described by it is as vague and meaningless to the native mind as the theory of the fourth dimension, and no native has sufficient powers of abstraction to conceive of spirit as a thing apart from matter nor of anything else that his natural organs of sensation fail to perceive. His ideals are purely materialistic

and the hazy glimpse of such a deity as the white man describes to him is painfully unreal and grotesque.

Buiti is the highest native conception of a beneficent being; but he is only human, armed with the natural agencies of *monda* or "medicine," and *Nyakwa*, who is also human, is the most definite conception of an evil genius; both of which will be duly explained.

Among all the rites and ceremonies of these pagan tribes, as they are called, there is nothing that verges upon worship, homage or devotion in the religious sense of those terms; nor is there any implement, symbol or accessory that is alleged to be or supposed to be divine or holy. The crude, wooden effigies seen in any village and often used in the ceremonies are not idols, as they are so often supposed to be and there is no sentiment of reverence or sanctity whatever felt or manifested toward them. They are simply images of *Buiti* used as repositories of the *monda* or "medicine" used by him in certain ceremonies and incidentally serve as symbols of that functionary or of whatever other one they may be intended to represent. Their relations to paganism are very similar to those of the cross to Christianity, with the essential difference that the effigy represents a physical and the cross a spiritual agency, the former implying faith in natural and the latter in supernatural powers. *Buiti* is not a deity nor his effigy an idol.

PROFOUND BELIEF IN WITCHCRAFT

Witchcraft is the sum of all other superstitions of these tribes and the profound belief in it is well nigh universal among them. That belief, however, neither involves nor implies a belief in any deity; nor do the ceremonials that are intended to prevent or counteract it constitute a form of worship any more than giving or taking a dose of quinine is an act of worship. Almost every rite performed by the natives deals with some aspect of witchcraft as the source to which almost every evil is ascribed.

The traditional origin, or theory of the origin, of witchcraft shows that this ancient and deep-rooted superstition

rests upon a tangible, physical basis. Of the traditions alluded to there are several versions that differ in details but agree in substance, so that they may be condensed into a single statement which amounts to this:

The wise men of these tribes have observed many things in nature which they can't understand and don't try to explain. Among other things they know that there are poisons and that there are antidotes. They know that certain things which are, of themselves, harmless may and sometimes do become dangerous by combining them. For example, the juice of *mbiba*, the oil-palm, which may be drunk without harm in any quantity; and, at another time, the bark of *iboga*, or bitter-stick, may be eaten with impunity and acts as a mild and harmless stimulant. But if the two are combined the effect is always dangerous and sometimes fatal. They know, too, that the odors exhaled by certain plants have a narcotic effect and a tendency to produce sleep, while those of other plants produce insomnia. They know that the fruit or juice of some plants is healthful or harmless while that of others is baneful. They know that the bite of certain reptiles is sometimes fatal and they likewise know that there are remedies that may render them harmless. Why these things are so or how they became so the sages don't pretend to know; but they do know them to be facts which they have learned chiefly by experience, the most convincing of all teachers. As so many people know these facts and some of them many more, it is only natural to suspect that bad people put them to evil uses.

Herein lie the secrets of witchcraft, which also include knowing where to find these and other dangerous elements, how to combine them in the right proportions and how to use them to bring about the desired results, such as sickness, death or other calamities to the person or family against whom the witch may have a grievance. The powers of a witch are only limited by the knowledge of such secrets and the means of obtaining the required ingredients of the *monda*, as all mystic "medicine" is called in the native tongue.

Such, in brief, is witchcraft as interpreted from the native point of view. It is the fundamental superstition upon which are based practically all the rites and ceremonies of paganism, including their prayers, incantations and alleged sacrifices which are called *mpago* and are more in the nature of a bribe than of a sacrifice.

THE MEDICINE MAN SUPREME

On the other hand, *oganga*, the "medicine man," is supposed to know certain secrets that prevent or counteract the spells that witchcraft is believed to produce. By the aid of certain kinds of *monda* he is supposed to be able to foresee the purpose of a witch or to diagnose the case from its symptoms and find remedies for it; and here is where *Buiti* comes into the cast. In his official capacity *oganga* often becomes *Buiti*, but he is not a deity nor does he pose as one. In changing his title, however, he changes his functions and in a certain sense becomes another personality, without changing his identity; just as an actor may play *Shylock* on one occasion and play *Hamlet* on another without changing his identity. In the capacity of *oganga* he takes the role of a medical expert or advocate or judge; while in that of *Buiti* he becomes a prophet or fortune-teller. Although the ceremony of *Buiti* is interspersed with many frivolous and irrelevant details, as most ceremonies are, it is one of the most spectacular and, at the same time, one of the most impressive of all pagan rites.

The chief purpose of this function is to discover and avert impending danger of sickness, death or misfortune from witchcraft, and there is no doubt that *Buiti* does, in many instances, really predict and prevent calamities that would otherwise befall his clients. By his shrewd and minute investigations of the *status quo* his keen perception of minor facts and his clever synthesis of theories he is often able to make deductions with axiomatic precision. He wrings from his clients, unwillingly on their part, so many little clues, isolated and incoherent, of themselves, and fits them together with such precision in his own mind as to

enable him, from time to time, to make such surprising revelations of certain events that have actually occurred. This inspires confidence in his prophetic powers. This he often does with such accuracy of detail and such assurance of manner as to impress one with the idea that he is reading it all in his *monda* just as a man would open a book and read a paragraph from it. In this manner *Buiti* plays so strongly upon the imagination and credulity of his audience that no one doubts his miraculous powers and the consequence is that many are deterred from crime by fear of being detected and exposed by him. That such is the case is shown by the many confessions he extorts from those who contemplate committing crimes, and no priest of any sect has greater influence in restraining men from crime than *Buiti* has.

The simple fact is that the ceremony of *Buiti* is a clever bit of detective work, well planned and well executed. Morally and socially it is as harmless and as beneficial as many institutions among more civilized races are which receive public sanction and patronage. It is no doubt true that the office of *Buiti* is sometimes prostituted to evil uses; but the same sometimes is true of clergyhood. To savage society *Buiti* is as important as police courts are to civilization and all things considered far less corrupt than most of them are.

A DEVIL OF THE JUNGLE

Nyakwa is about the most difficult to conceive of or to analyze of any thing in the whole heathen pantheon. He is the son of human parents; but no one knows who those parents are and even the parents themselves don't know it. He is mortal, though he is never known to die. He is invulnerable, though no one ever tried to wound him. He is invisible to all human eyes except to those of his intended victims and only once to them. Any one who looks upon *Nyakwa* knows that he must die within that moon and often death comes within the day or even the hour of seeing him. Those who claim to have seen him say that he is neither white nor black nor yet the color of a mulatto; but of a pale,

grayish-yellow hue like that of dead grass. He wears no clothing whatever except the skin of a deadly serpent about his waist. He lives in the marshes of the jungle and never leaves them except at night; then he often steals into the villages under cover of darkness and usually when it is stormy. Silently and without giving pain at the time, he gnaws at the heart, sucks the blood and blows his fetid breath into the faces of his victims, without leaving any mark. All this is done while the victim sleeps.

Nyakwa is the cause of many maladies; but his chief instrument of torture is the fever. The surest remedy for that is to conciliate him by paying *mpago* or tribute to him. This is done with long and imposing ceremony called *mbuiri nkani* or "mystery of the fever." I have twice been the immediate subject of this ceremony and believe myself competent to interpret it from the pagan standpoint. The lack of space precludes a full description of the proceedings here, but I may take occasion to say that no office of any ritual is more solemn or impressive than some parts of this heathen ceremonial is; and, pagan though it be, no man who sees and understands it can scoff at the piety of its intent nor condemn it as vile or vicious.

WHAT AFRICAN SACRIFICES SIGNIFY

In this, however, as in all other rites that I have witnessed in these tribes there was no spiritual deity addressed or alluded to. The sun, which is called *nkombi*, and that vague deity of the white man, which is called *Anyambie*, are, to the native mind, both natural and finite agencies. *Nyakwa* himself is not a deity nor even an individual, for there is a different *Nyakwa* for almost every swampy locality. In a sense he may be regarded as supernatural but preter-natural is a better term and the psychology of the whole affair is simply that of a commercial transaction which may be stated in such terms as these:

"Whereas, the officiating chief, as proxy and sponsor of his people hereby agrees to pay, and in the presence of witnesses, does pay, to the aforesaid *Nyakwa*, certain

mpago, or tribute, consisting of certain small quantities of rum, tobacco and other items of small value, for and in consideration of which the said *Nyakwa* agrees (or is supposed to agree) to not come within the purview of the village or molest the people, this stranger (myself) included, of the aforesaid chief for an indefinite period."

And such is the nature of all alleged sacrifices of the pagans of tropical Africa. They are simply the payment of tribute for a specific act, intended to satisfy the supposed avarice or greed of the thing to which it is paid. There is nothing sacred or reverential in the act or the thing appeased.

As to the images or effigies used in their ceremonies, as has been stated above, they are chiefly intended as receptacles for the *monda* and incidentally to warn others of the danger of committing crime. At the sight of an image of any kind found in a pagan land the civilized man jumps to the conclusion that it is an idol, simply because he sees no other use for it. If a pagan should come to civilization and see a terra cotta dog on the lawn probably he would jump to a like conclusion and he would be about as nearly right as his more civilized neighbors.

WHAT AFRICAN PAGANISM IS

Reduced to its simplest terms, paganism, as found among the tropical Africans, is a system of dealing with evils by placating the medium through which it comes. To the pagan mind every thing that moves without the agency of known force is supposed to have life, consciousness and autonomy. Every phenomenon that he doesn't understand is ascribed to *mbuini* (mystery) but not to a deity, supreme or supernatural. No pagan prayer is inspired by love, reverence or gratitude nor addressed to a deity. No pagan asks for grace or blessings from any source. Fear alone inspires his prayers and they are always addressed to the thing he fears. He prays to the approaching storm; but not to the power that rules the storm; he prays to the wind that threatens to wreck his house; to the waves that threaten

to capsize his canoe; to the thunder that he hears and believes to be the means of destruction; he pays *mpago* to a snake or a crocodile, as the price of his safety; but all these acts are done in the same manner and spirit as he would deal with other men. To be delivered from imminent danger of sickness, death or calamity is his only prayer and that is addressed to the object of his fears.

That the native African is the most superstitious of all mankind is not surprising, as all superstition is merely ignorance of fundamental facts; but many of the superstitions of Africans are surprising as explanations of simple phenomena that little children in civilization would understand to be due to very simple causes. To the average African mind, however, *mbuiri* (witchcraft) is the one universal explanation of everything that presents the least element of mystery and serves the native philosopher about the same convenient purpose as that hackneyed term, "Providence," so often employed by the white philosopher who is afraid to say there are some things that he doesn't know.

BRITAIN'S CRUSADE FOR TRADE

By P. HARVEY MIDDLETON

VERY few American business men realize, except in a vague way, just what wonderfully perfected machinery for international trade Great Britain now possesses. No comprehensive survey of the British network of associations, combinations, monopolies, banks and governmental departments so ingeniously constructed for the capture of trade in every part of the world, civilized and savage, has been published. This brief report endeavors to explain the fundamentals of some of these British organizations and to give some conception of their co-ordinated scope.

A typical example is the organization known as the British Trade Corporation, incorporated in 1917, with an authorized capital of £10,000,000 of which £2,000,000 is fully paid up. The balance sheet of December 31, 1919, shows capital invested in subsidiary companies £590,112. Of this sum £100,000 represents the capital of the Trade Indemnity Company, which insures foreign credits. Since its incorporation this Company has facilitated the export of goods of many million of pounds value. Although it was anticipated that it would be chiefly beneficial to the small merchant, its policies have been freely availed of by some of the largest British manufacturers.

In conjunction with the London & Westminster, Lloyd's, and the National Provincial banks, the British Trade Corporation formed the South Russia Banking Agency. Another undertaking in which the British Trade Corporation has an investment of £100,000 is the Portu-

guese Trade Corporation, which was specially started to compete with German interests. Another subsidiary of the British Trade Corporation is the Anglo-Brazilian Commercial & Agency Company, which has opened branch houses in Brazil, particularly at places where German influence in the past was strongest. Although they had experienced difficulty in getting delivery of goods ordered by manufacturers, satisfactory progress is now being made.

THE NEAR EAST AND EUROPE

Another undertaking in which the British Trade Corporation has invested £200,000 is the Levant Company, Ltd., which looks to have a promising future as the representative of British influence in the Near East. Somewhat as a corollary of the "fathering" of the Levant Company the whole share capital of the National Bank of Turkey (£243,119) has been acquired by the British Trade Corporation. The Levant Company has purchased a substantial interest in the business of J. W. Whittall & Company, Ltd., of Constantinople, and has opened branches, or established subsidiary companies, in Batoum, South Russia, Serbia, Roumania, Bulgaria, Bagdad, Greece, Egypt and the Sudan. Offices of the National Bank of Turkey are in operation in Constantinople and Smyrna.

The British Trade Corporation maintains a branch at Dantzig, and its Manager there has been able to assist some of the spinners at Lodz to re-start machinery that was greatly in need of raw material, and quite recently he helped the Polish agricultural community by financing shipments of artificial manures in exchange for products required in England. The Batoum branch of the B. T. C. is the only British bank in that part of the world. A branch has recently been opened in Belgrade.

At the meeting of the British Trade Corporation, last February, a dividend was declared of eight shillings per share on the issued capital of the Corporation.

The Anglo-Danubian Association, for the purpose of

promoting trade between the Austro-Hungarian Succession States and Great Britain and her Allies, was recently formed in London. It is proposed to supply raw materials on trust to these states, the finished products being re-exported to markets which can pay either in goods or money. Throughout the process of manufacture the materials are to remain the sole property of those who send them. A mission will proceed to Austria and Czecho-Slovakia, where investigation will be made into the legal condition, in so far as it affects the security of the goods, and negotiations will be entered into to secure additional safeguards from the governments concerned. The British Government has already given its approval.

BRANCH BANKS FOR INDIA

The P. & O. Banking Corporation, Ltd., incorporated recently in London, has an authorized capital of £5,000,000, and issued capital of £2,500,000. Lord Inchcape of the Peninsular & Oriental Steamship Line, is Chairman of the Board, banks participating in the enterprise being Lloyd's, London County Westminster & Parr's Bank, National Provincial & Union Bank of England, and Royal Bank of Scotland. It is intended to open branches of the Corporation at all the ports where the P. & O. Company and its allied steamship lines operate. Branches have already been established in Bombay, Madras, Calcutta, and Karachi.

It was announced in March, 1919, that in order to be in a position to compete for foreign business, several English banks had formed the British Overseas Bank, Ltd., capital £5,000,000 (£2,000,000 issued) in Preferred and Ordinary shares. The Preferred are sold to the public, while the latter are held by the Anglo South American Bank, Glyn, Mills, Currie & Company, Northern Banking Company of Belfast, Union Bank of Scotland, the Williams Deacons Bank, and other institutions.

The business of the bank is conducted on specialized lines, and effective co-operation with trade is maintained

by the presence on the governing council of representatives of trade interests. The bank specializes in all matter of exchanges, payments and receipts abroad, and the handling of foreign collections, documents and securities. Commercial credits are issued and the bank accepts bills in connection with home, colonial and international trade. Agencies and branches, if and where necessary, will be established in order to maintain an efficient representation in all parts of the globe.

An intelligence bureau is maintained to provide recent and reliable information. Such particulars of developments abroad as the bank may consider likely to lead to the satisfactory extension of its clients' foreign transactions are communicated to them. Agency business is undertaken. The associated banks support the British Overseas Bank, and provide the nucleus of business.

BALTIC AND MEDITERRANEAN BANKS

Announcement was made last April of the incorporation in London of the Anglo-Baltic and Mediterranean Bank, Ltd., (authorized capital £1,002,500) which was established primarily to finance importations of raw materials and to provide facilities to British manufacturers, merchants and shipowners. Its promoters pointed out that most of the important raw materials are to be found in the countries surrounding the Baltic and Mediterranean, and they contended that no British bank had attempted so far to cater comprehensively for these new spheres.

It is not intended to compete in the ordinary joint-stock banking business. The bank expects instead to transact all branches of foreign banking business, including foreign exchange, insurance, commercial credits, freight forwarding and warehousing, as well as to conduct a special shipping department. Branches will be opened in Hull and Newcastle to finance the Baltic timber trade.

The bank intends to establish an agency for banks abroad, and has received promises of support from banking institutions and business houses in Norway, Sweden,

Denmark, Finland, Belgium, Holland, Italy, Switzerland, France, Spain, Portugal, and the United States.

EXPANDING THE WEST AFRICAN TRADE

The African and Eastern Trade Corporation is a recent amalgamation of three firms—Miller Brothers, Ltd., of Liverpool, Millers, Ltd., and F. & A. Swanzy, Ltd. These firms, with the African Association, Ltd., were in close alliance with each other for many years past. F. & A. Swanzy, Ltd., is one of the oldest existing firms in the West African trade, having been established on the Gold Coast over one hundred years. Shortly after the completion of the fusion of these firms, further acquisitions of West African businesses were concluded, consisting of the Lagos Stores, Ltd., the African Traders, Ltd., Hatton & Cookson, Ltd., Tarquah Trading Company, Ltd., and W. D. Woodin & Company, Ltd. Securing the controlling interest in these businesses has immensely strengthened the position of the African and Eastern Trade Corporation in Lagos, Southern Nigeria, South West Africa, and the Congo, as well as giving it a direct interest in Liberia.

In 1919 the Africa and Eastern Trade Corporation acquired the business of A. J. Caley & Son, Ltd., Chocolate Manufacturers, of Norwich, to secure an outlet for the Company's purchases of raw cocoa. The nominal capital of A. J. Caley & Son, Ltd. was £120,000, and since then this has been increased to £1,000,000. There are now in course of erection four chocolate factories, which will treble the output. Following the policy of securing a market for their raw material, the African & Eastern Trade Corporation has purchased a controlling interest in Loder & Nucoline, Ltd.

During the past year the operations of the African & Eastern Trade Corporation have been extended to East Africa, with the intention of having a chain of stations right across the Continent, linking up East Africa with the Congo. The Company is now also established in

Morocco, Syria, Palestine, Mesopotamia, Persia, Constantinople, Roumania, Bulgaria and Singapore. It is hoped shortly also to open branches in Egypt and possibly in China.

The turnover of the various interests of the African & Eastern Trade Corporation in 1919 exceeded £22,000,000, of which about one-fourth was contributed by businesses outside of West Africa. About two years before the War, Millers & Swanzys purchased the 99 years' lease of a plot of land in Kingsway, London, and erected there a building known as the "West Africa House." This building is now too small for the business of the African & Eastern Trade Corporation, and a fine new building is now being erected at a cost of about £400,000.

The total investments in shares and in allied subsidiary companies of the African & Eastern Corporation amounted in July, 1920, to £6,759,635. Deducting the total reserves (including insurance fund, depreciation fund, premium on shares and general reserve) of £5,830,226, the amalgamated businesses stood on the books at less than a million pounds, which included their stock in trade and all investments. The profit for the year ending June 30th, 1919, amounted to £1,721,618, and after allowing for excess profits, duty on income tax of £720,000, and the interim dividend on the Preference Shares of £6037, there was available for distribution (including £36,225 brought forward from last year) £1,031,806. After deducting the interim dividend and the final dividend of 18 per cent, making 30 per cent for the year, and placing £350,000 in the general reserve fund, there was a balance £203,512 to carry forward. In addition to the cash distribution of 18 per cent, a bonus was declared of one share in every twenty ordinary shares.

A COLOSSAL TRADE ORGANIZATION

The Federation of British Industries is a trade organization of about 20,000 British manufacturing and producing firms. In November, 1918, the British Manu-

facturers' Corporation—an organization of 300 British firms for the expansion of export trade—was amalgamated with the Federation of British Industries. The Federation maintains trade commissioners in foreign and colonial markets, and is in no way connected with the British Government. None but all-British firms are admitted to membership. It is organized by trades and by districts, and conducts expositions in foreign countries and in England, brings buyer and seller together, compiles an export register, and is governed by a grand council of 211 members.

The Foreign Trade Department of the British Government is known as the Department of Overseas Trade, and was formed in 1918 by the British Foreign Office and the British Board of Trade jointly, a certain number of officers being appointed to it by each. It is responsible to both departments, and maintains a field service of three kinds: (1) Trade Commissioners for the British Empire; (2) Commercial Attachés in foreign countries, and (3) Consuls in foreign countries.

The following are advisers of the Department of Overseas Trade: Sir Francis Barker, of Messrs. Vickers, Ltd., representing the Federation of British Industries; Sir Algernon F. Firth, Bart., representing the Association of Chambers of Commerce of the United Kingdom; Mr. W. H. N. Goschen, of Messrs. Fruhling & Goschen, Merchant Brokers; Directors of the British Trade Corporation, etc.; Mr. W. L. Hichens, Chairman of Messrs. Cammell, Laird & Co., Ltd., Sheffield, etc., Director of P. & O. Steam Navigation Company, etc.; Mr. Walter Leaf, Chairman of London County & Westminster Bank, Ltd., Deputy-Chairman of Central Electric Supply Co., Ltd., Chairman of St. James & Pall Mall Electric Light Co., Ltd.; Mr. Kenneth Lee, of Messrs. Tootal, Broadhurst Lee Co., Ltd., Manchester; Director of British Dyes, Ltd.; Mr. G. A. Moore, of Messrs. Holt & Moore, Merchants, Liverpool; Director of Niger Co., Ltd., Chairman of the Executive Merchants' Committee of the Liverpool Cham-

ber of Commerce; Mr. J. W. Murray, of Messrs. Ker, Bolton & Company, Merchants, Glasgow; Chairman of the Glasgow Chamber of Commerce; Sir George A. Riddell, Bart., Chairman of the Newspaper Proprietors' Association; Mr. C. V. Sale, of Messrs. Sale & Company, Merchants & Shipowners; Deputy-Governor of the Hudson Bay Company; Captain Albert Smith, M. P. for the Clitheroe Division of Lancs; Colonel Frank H. Wedgwood, of Messrs. Josiah Wedgwood & Sons, Ltd., Chairman of Industrial Council for the Pottery Trades.

DEPARTMENT OF OVERSEAS TRADE

The Department not only collects information but takes action in trade matters. Its power of action is subject to two reservations: When a piece of business becomes predominantly political it is to be handed over to the Foreign Office, and when special subjects such as commercial treaties arise they are to be put in charge of the appropriate department of the Board of Trade. There will be sixteen trade commissioners in the British Empire. The Department of Overseas Trade maintains a special register, the subscribers to which are given early information regarding trade openings abroad.

British consuls report to the Department of Overseas Trade regarding all firms in their districts who can be recommended as possible importers of goods of British manufacture. This information includes the commercial and financial status of the firms, their local and European reference, the goods particularly required, terms of trading, and language in which correspondence should be carried on. This information, after being edited, is issued to the Association of Chambers of Commerce, and the Federation of British Industries.

There is a growing demand for closer association among British industrial concerns in order that more economical methods of production may be adopted. Coupled with this demand is a plea for association as a means of facilitating sales. The various departmental committees

of the British Board of Trade, formed to investigate the position of specific trades after the War, laid particular stress on this matter in their reports.

The Committee on Engineering said:

"We are inclined to think that in the future a non-associated manufacturer will be far more likely to damage the trade of the country than general combinations."

The Committee on Electrical Trades said:

"Only by the creation of strong combinations will it be possible for Great Britain to compete with the great foreign corporations, which not only manufacture but undertake comprehensive contracts, make powerful financial alliances, and thus exert in every direction greater influence than is possible in the case of any individual firm."

The Committee on the Iron and Steel Trade said:

"The Committee recommends that the iron and steel manufacturers should associate themselves for the purpose of export trade, and should form common selling organizations for the extension and consolidation of associations which already exist. The various products are well distinguished, and their export distribution should be controlled by associations of manufacturers concerned in their production. The Committee recommends an organization divided into groups, each dealing with specific products."

A Committee of the British Board of Trade which investigated the export trade of Great Britain with the object of devising methods to meet the severe competition which was anticipated in the iron and steel trades after the War recommended, in February, 1918, that the iron and steel manufacturers should associate themselves for the purposes of export trade, and should form a common selling organization by the extension and consolidation of existing associations. The organization to be divided into groups handling specific products. The following language appears in the recommendation:

"The Committee are of the opinion that these associations should be voluntary rather than imposed compulsorily; but are, at the same time, aware that success depends upon the adherence of the majority of makers. They believe that this adherence would be readily given if the several manufacturers were officially recommended by His Majesty's Government to co-ordinate their efforts in the manner proposed."

Similar views and recommendations were made in the

case of the shipbuilding and marine engineering, electrical, textile, silk, lace and hosiery trades.

On April 24, 1919, the Committee on Trusts presented to the Ministry of Reconstruction a report in which it stated that "There is, at the present time in every important branch of industry in the United Kingdom an increasing tendency to the formation of trade associations and combinations, having for their purpose restriction of competition and the control of prices. Many British associations have already been formed which deal with raw material or intermediary products, and there are others which have to do with the more finished goods. These associations occupy a prominent position in the iron and steel, chemical, soap, tobacco, salt, cement and textile industries.

THE BRITISH METAL INDUSTRY

The Chairman of an important metal association, referring to the fact that before the war the British metal industry was in danger of being crushed by foreign competition, stated that by securing remunerative prices in the home market they could make a successful bid against foreign competition in the export trade. They had a fighting fund for the purpose of subsidizing members who found it necessary to sell at less than an economic price in order to cut out competition. This might be called meeting dumping with dumping, but he did not agree that British firms dumped in the aggregate much more than foreign firms. They had dumped in Belgium as a reprisal against Belgian dumping in England.

The Chairman of a number of important associations in England stated that in the past it had paid Germany handsomely to export a large part of her steel products at a loss. In the future it will pay England to do the same. He further said:

"I have no doubt at all that it would be sound policy to sell in foreign markets at a loss. It is true that 80 per cent of our output goes abroad, so that it is not a matter of dumping an occasional surplus that the home market cannot absorb, but a large proportion of our exports go to our own

colonies, and by getting some little preference there and sufficiently good prices at home, the industry will be able to undersell Germany or America in such a market as South America, even if that meant selling at a loss. About 60 per cent of our output is sold within the British Empire, and 40 per cent outside. A slightly increased preferential price on the 60 per cent would enable us to hold the 40 per cent against competitors."

The Committee on Industrial and Commercial Policy, however, recognizes that it will be desirable to institute in the United Kingdom machinery for the investigation of the operation of monopolies, trusts and combines, similar to the commissions and other tribunals created for that purpose in the United States. It recommended that the British Board of Trade should be authorized to obtain information and to present to Parliament an annual report upon the nature, extent and development of such forms of organization, to make preliminary investigations into any complaint as to restraint of trade, and to refer such matters to a special tribunal.

It will be evident from the above account of what has already been done by governmental and private organizations to strengthen the hold of the British trader and manufacturer in foreign markets, that the British business man is today determined to recapture the trade won from him in pre-War days by the Germans. Great Britain today has enormous resources to draw upon. Mesopotamia is certain to become one of the great granaries of the world as a result of the irrigation system planned by British interests. The absorption of German East Africa will enable the British railroad builder to realize his dream of a line from the Cape to Cairo. German South-West Africa and other German colonies will yield rich returns to the British miner and agriculturist. The new treaty with Persia—frequently described as the greatest diplomatic stroke since the acquisition of the Suez Canal shares by Disraeli—will give the British Government a controlling interest in the Persian oil fields, which may well be one of the big factors in paying off the British war-debt.

WHAT VIVISECTION HAS DONE

By S. DANA HUBBARD, M.D.

[Acting Director Bureau of Public Health Education.]

THERE are always two sides to every question. Vivisection is no exception—there are those who favor this form of research and there are those who oppose it.

Now let us look the facts squarely in the face.

What have the Anti-vivisectionists done? What benefit has come from their hands?

Dr. W. W. Keen, an eminent surgeon, is authority for the following:

“The anti-vivisectionists have not a single life saved by their efforts.

“Not a single beneficent discovery has been made by them.

“Not a single disease has been abated or abolished by them, either in animals or in mankind.

“All that they have done is to resist progress, to spend money to conduct campaigns—of abuse and misrepresentation.

“They care apparently little or nothing for the continued suffering and death of human beings or the grief and ensuing poverty of innumerable families.

“They have provided that 26 out of every 1,000 dogs, cats, monkeys, guinea-pigs, mice and frogs experimented upon shall escape some physical suffering.

“They insist that all experimental research on animals stop and that thousands of human beings and useful animals shall continue, year after year, to suffer and die.”

The Age of Experiment is the Age of Progress.

Stop experimentation and you stop progress—medicine is no exception.

Dr. S. Weir Mitchell, an intimate friend of Dr. Keen's, when visiting the anti-vivisectionists' exhibit in Philadelphia, put the matter of the opposition to experimentation in a nutshell when he said:

"Your exhibit is not quite complete—you should place here a dead baby and there a dead guinea-pig, with the motto: 'Choose between them.'"

The anti-vivisectionists may be sincere, but it is the opinion of many that they are not fair in their methods of opposition.

Many persons seek light and truth about animal experimentation. The word vivisection is objectionable, for its meaning is usually extended to cover experiments on the effects of the varied and difficult problems connected with nutrition and physiological chemistry, efforts to determine the processes of digestion, the effects of drowning and the value of various methods of resuscitation, of hypodermic injections of various drugs, but none of these involve any "cutting up of a living animal." Only about 6 per cent of all experiments on animals are strictly vivisections. Every surgical operation is literally a human vivisection—and we take it for granted that these are done humanely and properly and an anæsthetic is used, whether such fact is so stated or not. Then why not in simple justice so infer when reading or being told about animal experimentation?

VIVISECTION'S REAL AND NECESSARY OBJECT

While animals have benefited enormously from experimental research, the chief object has been to benefit the human race, to diminish suffering, baffle death, and save the breadwinner to the family and the country, or the loved one to relatives.

There are only three ways open to lessen or abolish disease:

1. Try a new remedy or method or operation and try it *first* on man—God forbid!—yet there are advocates of human vivisection.
2. Try them first on the lower animals and then on man, provided the trials on animals showed that they would be an improvement upon existing methods. If trials on the lower animals proved that they were ineffective or dangerous then they should **not be tried on man at all**.
3. Try no experimentation at all either on animals or man, that is to say, "Never make any progress."

Remember, that the least deviation from the usual practice, whether in using a new drug or even a larger or smaller dose, or in a different way, is an *experiment*.

Hypodermic injections were unknown until about fifty years ago.

"*Clinical observation*" is constantly vaunted by the "Anti's" as the proper and best method of progress. I would be the last to decry this method of progress, but the moment you act on your clinical observation by any new method, any new dose, or drug, or any slightly varied or new operation you are making an experiment and on a human being.

If the departure is so great from prior procedure, is so great as to involve serious results, then I hold that no one has any right to try such upon a human being first, if it is possible to test it on a lower animal.

In *seven years of experiment* on animals more was done for alleviating human misery from the ravages of syphilis than clinical observation has done in over four centuries.

Objection has been made that animals are so differently constructed from man that inferences from results on animals are of no value in the case of man. There are a few such differences—these are known, and even if sometimes marked differences did exist, such for instance as the effect of belladonna or of opium—but as a fact, barring these few exceptional cases, the organs and functions of man and animals correspond exactly in health and disease and the effect of drugs and operations are parallel and in most instances identical.

The "Anti's" claim the support of a large number of doctors. Undoubtedly there are some physicians who

endorse their views, but who are they? Investigation into these names shows that if the persons to whom they belong are living they are unknown in the profession of medicine. A few of earlier times were men of distinction, but to cite the opinions of men who died years ago against the opinions of similar leaders of today, is like citing opinions of eminent engineers of the last century as to the methods and even the possibilities of constructing a Panama Canal—you know it was for years considered by the most eminent as impossible—but it was done, against the opinions of engineers of today. Facts speak for themselves.

Many of the victims of a dreadful disease (syphilis) are innocent. Many are innocent little children—unborn babies. Some are dead when born, others destined happily to an early grave, and still others, less fortunate, doomed to drag out a most miserable existence. Of course, it would be impossible, except as a last desperate resource, to experiment with this disease on human beings.

Mechnikoff—1903, first succeeded in inoculating this disease in apes and later in other animals. Experiments, heretofore impossible, were immediately begun. In 1905 Schaudin and Hoffman thus discovered the germ. In 1910, after a most extraordinary series of experiments with 605 other remedies, Ehrlich discovered Salvarsan, “606,” since which time we have had the whip-hand over this plague.

Anti-vivisection if followed to its logical end would not let us fish as a business, for the fish are suffocated by their removal from the water and are thus “tortured,” not for their benefit, but for our food. Would it not also be illogical to poison or trap a rat, even if the plague were at our doors? Or a mouse, if the house is invaded?

“Scientific hells,” “fiends incarnate,” “imps of hell,” “scientific murder,” “black art of vivisection,” “abominable sin”—such are some of the many terms applied to vivisectors and research institutions by these advocates.

VIVISECTION HAS BENEFITED MAN AND ANIMALS

The achievements of research:

1. Antiseptic method of surgery made possible.
2. The many wonders of modern surgery are largely the results of animal experimentation.
3. Surgery of the internal organs—stomach, spleen, liver, appendix, intestines, gall stones, kidneys, and female organs is possible through the study of infection by experimentation on animals.
4. Modern and wonderful surgery of the brain made possible through experimentation.
5. The new surgery of the chest, including the heart, the lungs and large vessels made practical through experimentation on animals.
6. Tetanus (lockjaw) has been almost entirely abolished. Prevention is possible only through such experimentation on the lower animals. This formerly often occurred after operations and after accidents, especially pistol shot wounds and fireworks.
7. Reduced the death rate in open fractures (compound) from 66 in a hundred fatalities to less than one in a hundred.
8. Reduced the death rate in major female operations from 66 in a hundred to from 2 to 3 in a hundred.
9. Made the death rate in operations for rupture, amputation, and removal of tumors a negligible factor.
10. Abolished yellow fever—a wonderful triumph—and through its sanitary effect on engineering problems, made possible the Panama Canal. In this instance human volunteers had to be used and one, Dr. Lazaar, sacrificed his life.
11. Diminished materially the ravages of malaria.
12. Reduced the incidence of rabies (hydrophobia).
13. Devised a method of direct transfusion of blood, which has saved many precious lives.
14. Cut the death rate of diphtheria all over the world. In 19 European and American cities the death

rate has been made to fall from 79.9 per 100,000 population before antitoxin to 19 per 100,000 (1894 before—1905 after). The rate is less than one-quarter its former rate.

15. Reduced the mortality of epidemic cerebro-spinal meningitis from 65 per cent to under 25 per cent.

16. Largely abolished post operative hospital sepsis and gangrene, the foes of surgical undertaking. Formerly no matter how brilliant the operation or the operator, these fatal hospital diseases, sepsis and gangrene, were apt to appear and destroy the patient.

17. Made operation for goitre possible.

18. Aided in reducing the death rate of tuberculosis. Koch's discovery of the germ of consumption is the "*corner stone*" of all of our modern sanitary achievements.

19. Through animal experimentation the British Army abolished Malta fever. Before research this destroyed in 1905, 1,300 men of the garrison; in 1909, after research, there was only one death.

20. Almost abolished puerperal (childbed) fever. Statistics before discovery, 5 to 57 deaths of mothers per 1,000, while today after such discovery the rate is 1 in 1,250 births.

21. Discovered Salvarsan, "606," which bids fair to protect many innocent wives and unborn children.

22. Typhoid vaccine largely abolished typhoid from armies of the world wherever used.

23. Through animal experimentation we are gradually lessening the ravages of cancer and we hope we are approaching the discovery of the cause of cancer, poliomyelitis, and other children's diseases; then we hope the cure will quickly follow.

25. Sleeping sickness—methods of transmission, pathology, and treatment.

26. Animal experimentation has enormously benefited animals by discovery of the causes, and in many cases the means of preventing, and in some a positive cure. Conspicuous among these are tuberculosis, rinderpest, anthrax, glanders, hog cholera, chicken cholera, lumpy jaw, and other diseases, some of which also attack mankind.

Surely this list is sufficient reason to forward for experimentation and any intelligent person would be sufficiently influenced by the same. When science has progressed through this aid, who would dare stay the hands of men who are trying to lift the curse of disease from the whole race, not only of mankind, but of animals also? I say, if there be such creatures, let such cruel ones, enemies of our children, of our sick, in fact enemies of humanity, let them stand up and be counted by all.

There is still much work to be done—in fact, we have just crossed the threshold of preventing and curing of the infectious diseases. The work on malarial fever is advancing rapidly through mosquito study, and if we continue to progress as fast as we have in the past ten years, this dread disease will be annihilated.

The pain inflicted in all the laboratories of the world put together during an entire year is less than that which is every day inflicted in the slaughter of animals for food, and this, too, under the most modern cruelty of animal supervision; also, to that which farm laborers inflict in spaying animals by thousands in order that beef and mutton may be more tender or have a more pleasant flavor; to that inflicted by the hunter when the victims of his sport are imperfectly shot, die a lingering death, or wounded are unable to water and feed themselves and so suffer interminably; to that which women allow in order to have fine feathers (ospreys) in their hats and furs upon their backs.

MISPLACED SYMPATHY

So far as the satisfaction of appetite, the pandering to the so-called sportsman's instincts, or the gratification of vanity are concerned, those things known to be useless and cruel, may go on uncriticised or unchecked. The "Anti's" disregard these facts or to date have made no effort to prevent them, so far as we can determine. The only pain which seems to stir the feelings of the "Anti's" meeting their disapprobation and enabling them to indulge in their familiar epithets, is one of the most justifiable bits of pain in the

whole world—a pain inflicted with the noblest of all objects and by humane men, for so admittedly must the medical profession be considered—that object being to prevent future pain, which otherwise would encompass the whole of life.

The “Anti’s” do not come in contact with disease and suffering all day and every day as medical men do, therefore it is impossible for them to realize how widespread sickness really is and what terrible form it takes in many instances. Their ideas are vague, they talk about physical suffering without any intimate knowledge of this question. These bestow their sympathies along upon the moderate number of animals subjected to the vivisector’s knife or syringe—guinea pigs, dogs, rabbits, mice, monkeys, etc.

They have no sympathies for the large number of victims of preventable disease which would have suffered far more intensely if the few had not been sacrificed. Can it be wondered at that medical men, whose experience is so different from theirs, should feel otherwise? The busy doctor’s life is not one in which there are just a few painful partings with dear ones, but he has many daily experiences, his life is literally steeped in pitiful and sad experiences, from early morn till late into the night. His sympathies aim at the relief and cure of all this evil and the death of a few guinea pigs or rabbits is a necessary incident which he has the courage to permit because of the greater good that is the ultimate result.

MAKING DISEASE HARMLESS

Bacteriology is at the bottom of hygiene and sanitation.

It is by observing hygienic precautions that certain communicable diseases are prevented.

The basis of bacteriology so far as it relates to the production of and recovery from disease is animal experimentation.

Filth or dirt has been defined as matter out of place. Blood on a carpet is certainly dirt, and it ought not to be there, but blood in the arteries or veins is in its right place and it does the duty of nutrition. One of these duties is to

exact a protective influence upon the whole body. We are exposed, all of us, so long as spitting in public places is not prevented, to the germs of many communicable diseases, particularly consumption and influenza, but we do not all die of these diseases. This is mainly because the scavengers of our system—the white blood corpuscles—are in good trim and are able successfully to devour the bacteria that enter our interior. It is only those persons who are “run down” and in whom the white corpuscles are below par that contract disease. In assisting the white corpuscles to perform the duty of destroying dangerous organisms entering our bodies, the co-operation of certain substances dissolved in the fluid portion of the blood is also essential.

Some time ago—quite recently—there was discovered auxiliary substances and we called them “Opsonins,” from a Greek word which means “to prepare the feast.” The opsonin either adds something to the bacterium which makes it tasty to the white blood corpuscles (or neutralizes) or modifies something which previously made it distasteful. The white blood corpuscles will not ingest and devour most bacteria from an ordinary culture fluid, but they do so eagerly and immediately the bacteria are bathed in serum and the serum which is most efficacious in acting as a sort of sauce is that which has been obtained from an animal which has been previously infected with the same kind of bacteria, and which has recovered from the ailment such bacteria have set up. This is not mere fancy or theory. It is well known that the yeast plant (yeast, by the way, is very similar in many details to bacteria) may be grown in a solution of sugar and that the sugar is broken up and disappears and two new substances formed from the sugar take its place. One of these is the poison alcohol.

If bacteria grow in the blood they produce poisons in a way analogous to that by which yeast produces alcohol. These poisons are called *toxins*.

There are substances in the blood which are called anti-toxins, because they neutralize the toxin produced by the bacteria. The presence of antitoxin (diphtheria) is a

means of natural defense against the harmful effects of the toxins which they would otherwise produce. This may be determined by a test devised by a scientist and is called after his name, "The Schick Test."

The marvelous part of nature's defense is that unless we are overwhelmed quickly, antitoxin in our blood increases in proportion to the amount of toxin. How can we explain this? The following is a practical method of so doing. It is a familiar fact that manual labor increases the hardness of the palms of the hands—the friction stimulates the outer cells into increased activity, so that the top layer of the skin grows in thickness. The body affords numerous instances of how it is capable of rising to the occasion and increasing its defenses when called upon similarly. Just in this same manner the presence of a toxin in the blood stimulates living cells to produce more and more antitoxin. Another peculiar fact is also demonstrable—the blood remains rich in antitoxin for a considerable time afterwards, this showing how it is that one who has had an infectious disease does not readily take it a second time. He is *immune*, we say, and will continue to resist reinfection for a certain number of years, because his blood is so rich in the antidote. By infecting the horse we can obtain these anti-bodies in great concentration and transfer them to human beings of all ages, and so prevent and cure several diseases.

The principle of serum treatment depends upon these ascertained and definitely proven facts, the direct result of animal experimentation.

Now something about consumption. How may we cure this dread disease? We know the cause, but we have not as yet discovered a remedy. Scientists everywhere are working on this and they should be aided and not hindered. In the treatment of tuberculosis the doctor tries to increase nature's method of cure: good, easily digested food, pure air, at all times. These do much to increase the healthfulness of the blood stream and fortify its natural power of destroying germs. Many times this alone suffices, but at other times it is wholly insufficient, particularly if the

disease has advanced and the number of bacteria is too great for the enfeebled white blood corpuscles to battle successfully against.

If it existed the doctor would administer some opsonin by injecting it under the skin, in order to increase the resistance of the patient. But in this disease (tuberculosis) we do not know the opsonin—it is up to us to find it.

HOW ANTITOXINS ARE PREPARED AND USED

Let us choose for description diphtheria antitoxin:

A pure culture of virulent diphtheria germs is grown in broth and the toxins formed are filtered off and a certain amount is injected into a horse. A slight swelling appears locally. When the animal has recovered, a second larger injection is given. This blood is collected. This is repeated several times, for it is rich in diphtheria antitoxin, the natural antidote that has enabled the horse to withstand at the end of the series of injections a dose of toxin, which if given earlier would have killed it. The horse's blood is allowed to clot, and the liquid residue (serum) contains the antidote. This is purified and concentrated and is the diphtheria antitoxin used so successfully in the treatment of diphtheria in human beings. But it must be given early and in sufficient dosage.

What more natural way is possible of treating a disease? It has been used in New York City since 1895, and has reduced the death rate from diphtheria from about 40 per cent to 8 per cent.

The pathologists at first were timid about using horse serum in human beings even if it carried the life-saving antitoxin or opsinin, but Professor Richet argued that if this serum protected a horse injected with many times a fatal dose of diphtheria toxin, it should do so in the case of a human being, and he tried it and it was successful.

The diphtheria poison is very deadly in the human being, therefore to be effective it must be used early in order to antidote the toxin. Today the treatment of diphtheria is mainly by using diphtheria antitoxin. Not to employ it

indicates that the doctor is uninformed and is jeopardizing the precious life of his patient and to continue not to use such an antidote is little short of criminal.

Diphtheria has not been stamped out because the efforts of prevention are not adequate and those that are known to science are not uniformly and generally applied.

Prevention, it is true, is better than cure, but cure is better than suffering and death. Today the medical profession can positively cure diphtheria, and by use of a vaccine can prevent it, and if medical progress continues its stride as it is doing, who can doubt but that in the very near future diseases like yellow fever, typhus, typhoid and small pox will not only be rare, but will be stamped out.

Why, may we ask, has typhus and typhoid fever died out in our large American cities? In our opinion it is incident directly to the learning of their nature, improving sanitation and destroying the vermin that transmit typhus and the bacilli which cause typhoid fever. How did we learn these facts? Of course, largely through animal experimentation.

Many citizens quite often complain of the extravagance of public officials and of the indifference in quarters affecting health. Why is this? But, you will say, how does this come in here? The public authorities are not vivisectors. No! it is true that in many instances they are not, but the action of all public health officials is directly due to the desires of public opinion—healthy public opinion which has been preached to deaf ears for many years, has at last impressed itself upon many minds and this knowledge was the offspring of pathological experiment. It was not until the germ of typhoid was isolated and recognized that prevention and control through such means as the pasteurization of milk and the purification of water became certainly possible, yet these alone were not wholly effective under conditions such as exist in warfare until the immunizing vaccine was produced, tested on animals and man and then successfully used in our armies. Now having such a lesson

before us, must not the people obey the teachings of science?

Let us pursue this vivisection still further.

A ship enters our port. It is infected with *plague* and the ship is also infested with rats—carriers of plague.

Would it be preferable to kill the rats and so prevent them and the disease—a terrible pestilence—entering our port? A plague visitation would cause untold disaster. Or would staying one's hand, because the slaughter of the rats would be a painful proceeding, be the more preferable?

The captain who spared the rats would be guilty of a criminal act which would cause the unnecessary death of many innocent human beings, and I might state that it is so with many anti-vivisectionists, who by their acts are similarly causing the deaths of many innocent human beings, as well as animals.

The anti-vivisectionist sees only the pain inflicted and does not heed the pain prevented.

In conclusion:

Unnecessary and needless vivisection should be stopped.

Vivisection by inexperienced, unsophisticated, and improper individuals should be stopped.

All vivisection should be accompanied by every possible precaution to prevent suffering of all kinds.

No one should needlessly restrict scientific bodies in pursuit of knowledge to aid the sick or suffering.

HOW FRANCE HANDLES THE DRINK PROBLEMS

By MELVIN D. HILDRETH

[*Ex-Sergeant F. A., A. E. F.*]

IF IT was water only I had I would prefer not," said a French *sous officer* who stood watching us drink the filtered favorite drink of the American soldier from a Lister bag. Although this conversation was an incident of the Argonne of a year ago it illustrates the attitude of the average Frenchman concerning water. Their rule of health frequently found posted in public places is "never drink water unless you know it is safe and even then drink very little of it unless you are on the march or take food with it."

Yet there is a liquor problem in France in spite of the tendency of the people to drink sparingly of light wines. One of their writers, M. Saillens, said recently, "Other nations may think that we are temperate, because a drunken man is such a rare sight among us, and because drink is no part of our tradition. But the French system is to take 'something' every hour or so, with the consequence that a man will suddenly commit some crime, and be removed to an asylum, although he may have been drunk but a very few times in his life. Alcohol and improvidence are the two curses of our workmen."

Just how serious was this problem at the outbreak of the war is shown by a striking letter written by Capt. Ferdinand Belmont of the Chasseurs Alpins. Writing from Annecy on August 4, 1914, he said:

"To describe our journey as a pleasant trip would be exaggeration; but one must take things as they come and put up with the means in requisition (32 men in each compartment—horses lengthwise, 8)—whereby everybody is crammed in pell-mell without distinction of either rank or class and with half the men more or less intoxicated . . . It is here that we realize the abominable action of alcohol on the working class popu-

lation of towns and even of the country. At the medical inspection it is indeed a lamentable spectacle to see these capital fellows of twenty-six or twenty-eight, miners of the Loire or day laborers from everywhere, with ulcerated stomachs, fatty hearts or poisoned nerves who are manifestly incapable, even when desires and will powers are adequate, of performing the task now set them. What a scandalous curse that corrupting alcohol is! And what a crime these young men commit, irresponsibly, unfortunately against their families and descendants, against their country and themselves. At their age, between twenty-five and thirty, which ought to be the flowering time of physical and moral being, they are already shattered, almost old men, morally and physically slaves of their vices, socially useless if not dangerous. Among the dangers which now threaten France, this one is perhaps as redoubtable as the cannon and bayonets of the Germans."

Yet these same men were able to turn back the enemy at the Marne and to hold them at Verdun. When they discovered that they must be sober to fight they faced their problem and saved France. "A word will bring pride and light to their eyes" writes Dr. Talbot. "It is 'Vive la France!' They are citizens of a world wider than their fields, they belong to 'la Patrie.'" It was in effect an appeal to patriotism that enabled France to solve the liquor problem. All along the front, in billets and in railroad stations could be seen posters showing the French soldier seated at a table while behind him stood the Kaiser filling his glass. The French soldier, facing such an appeal, dropped his liquor and used wine only in moderation. He saw to it that he was always fit to fight.

WHY WINE IS A NECESSITY

Perhaps one should not be too critical of the French tendency to ignore water, especially for drinking purposes. Wells two hundred feet deep will often yield but a chalky fluid. The soil of France, while fertile, is very porous and most of the water comes from ponds, cisterns and deep wells. The water is muddy, scarce and hard to get. Wine has become a necessity.

France produces on an average one-third of the world's supply of wine. The main sources of production are the lower Languedoc (from which comes one fourth of the French production) Bordeaux; Burgundy, the lower Loire, the Lyons district and Charente. The vineyards of Champagne cover thirty-seven thousand acres and produce thirty

million bottles of which all but eight million are exported. Wine is the daily beverage of all classes of people in the center, east, west and south of France while those of the north and north-east drink beer, and the north-west, cider.

It varies in price from four centimes to forty francs a bottle. Sometimes when wine is very plentiful producers will send one barrel free to every person sending two empty wine barrels to the producer. Before the war common or "Vin ordinaire" ranged from one franc to thirty centimes a quart.

The wine falls into two classes, well known to the doughboy, Vin rouge (red) and Vin blanc (white) and it seems there is quite a distinction between the two apart from the color. White wine is classed as a tonic, supposedly making the consumer very happy and to act as a brain stimulant. It is a wine, so we are told, for early morning and for sportsmen. Soldiers, for example, are often advised not to drink any red wine, or liquor, which would, to quote the phrase, "cut off their legs." They are urged to restrict themselves to white wine entirely. Red wine is supposed to be rich and, like food of that character, will make one sluggish. The workingmen who drink their quart of red wine at mealtime will not drink it during working hours. The white wine is usually of good quality and brings a better price than any of the grades of red. It is made, as is Champagne, from black grapes usually.

The better classes will seldom drink wine between meals, unless it be heavy wine such as Vermouth, but the working classes drink it at any time of the day. It may be interesting to note that the three great wine centers, from which the products get their names, are Champagne, Bordeaux (claret) and Burgundy.

EXTENT OF THE FRENCH WINE INDUSTRY

In the charente is produced a brandy called Cognac from the town of that name. It is produced by distillation from heavy, coarse wine. As production was stopped for a considerable period, due to the influx of the phyllox-

era, French brandy was replaced to some extent by whiskey. Whiskey depends on the method of production while cognac depends on the vineyard. Wine and the products of the vineyard vary constantly. For this reason it is dated and some years will be more prized than others. Rainfall, frosts and the elements affect the vintage and some farmers believe that the best is produced in the years of comets.

On the plain of Champagne (the word formerly meaning a flat, open country) is produced the best cognac, called "fine Champagne," which however should not be confused with Champagne wine. In 1913 France had thirteen hundred distilleries and over thirty-three hundred private stills.

The wine was introduced into France by the Greeks about six hundred B. C. The vineyards are not as we perhaps visualize them, that is great hanging vines loaded with clusters of grapes. They are bits of stumps about two feet high kept constantly trimmed that all the strength may go into the fruit. The yearly production is about one billion, five hundred and sixty million gallons. Italy comes next with thirty-one million and Spain follows with twenty-three million.

In 1913, (the last year for which statistics are available,) the profits on "Vin ordinaire" and "Vins Supérieurs" amounted to 1,505,492,355 francs.

Cider is the drink of Normandy, Brittany and Maine. These districts in 1913 produced over five hundred million gallons of cider and in 1916 over one hundred and twenty-five million gallons. Some of the farmers prepare a substitute obtained by pouring water over pressed apples or grapes. Such drinks are called from their bitter taste, "piquettes" from "piquer," to sting.

IMMENSE PRODUCTION OF LIQUEURS

Besides the variety of wines produced there is also an immense quantity of liqueur. The liqueurs are distilled each in a section of the country where grow the various

herbs which give it the distinctive flavor. For example, "Chartreuse" comes from the Alpine districts and Terragone from north Sabin. Absinthe comes from the Swiss mountains and is prepared from herbs which grow on the hills. It was first used about 1840 in Algeria where a few drops are placed in a glass of water by the troops to improve the taste. It gradually spread to the entire nation. "Benedictine" of which over four hundred thousand gallons are annually produced by the former abbey of Fécamp is a famous digestif.

Now we know what an industry this is and what it means for France to even suggest its curtailment. In America the production of drink was confined to a few cities. Over there it is part of the business of every home. In 1830 there was an annual consumption, per capita, of forty quarts of wine and one of liquor. In 1914 it had grown to one hundred and fifty quarts of wine and four of liquor.

During these years the French temperance societies have been working without headway against a universal habit of a people. But during the war, when the nation was actually in extreme danger, they put aside their liquor and drank wine in moderation and astounded the Germans with their masterly resistance. They were supposed to be a decadent nation, perhaps they were heading that way; but a poster campaign conducted by a few earnest men caused them to remember the picture of the Kaiser filling the glass of the poilu and they put their drink aside.

THE BLUE CROSS TEMPERANCE SOCIETY

The first society ever organized in France to combat excessive drinking was the Blue Cross, or "La Croix-Bleue, société Française de tempérance." "Its origin," says M. Monod, the general secretary, "can be traced back to 1873 when a few Christians in the Protestant country churches of the east, bordering the Alsatian frontier spontaneously took the pledge of total abstinence without knowing of similar movements in other countries." In

1883, in connection with the temperance movement in French Switzerland, the Blue Cross was organized in France. In 1892 it was organized as a national society with a central committee and branches in the colonies. During that year great progress was made in its work and the doctrine of moderation was preached generally throughout the republic. Societies, which allowed their members to use wine, beer and cider in moderation were established in the various communes and the work of education started.

Later on the "Ligue Nationale contre l'Alcoolisme" which is now a semi-official agency was established. This is a federation of other leagues and the members are not bound to any definite pledge, the associations generally working against the use of liquors and for moderation in the use of wine.

There is, in addition to these, a Roman Catholic temperance society known as the "Ligue Antialcoolique de La Croix Blanche." Thus it can be said that the French of every faith are working for a definite end.

At the commencement of the war the Blue Cross initiated a campaign against the use of absinthe, which in its concentrated form is more of a drug than a drink, affecting the brain and causing temporary insanity. Here, too, posters were used. One showing a mother and tiny son watching a father in the midst of delirium tremens had a tremendous effect, and when at last the matter was brought up in the Senate and House of Deputies the bill prohibiting absinthe was passed by an overwhelming vote. It is the aim of the French societies however to eventually prohibit all drinking of alcoholic liquors. "We put the emphasis for a long time on individual abstinence," says M. Monod of the Blue Cross, "but by degrees we became supporters of prohibition by law."

GOOD THE AMERICAN TROOPS ACCOMPLISHED

Undoubtedly the coming of the American troops helped greatly in educating the people as to the filtration

of water and its use for drinking purposes. The American soldier was part of the only army which did not use liquor at the front; he went over the top with a canteen of water and, to quote Sargeant Verdelet of the French army, himself a *poilu*, "Those who knew with what indifference and what scorn of danger the Americans went into battle say that these devils of men risked their lives as if they had a couple in reserve."

Jean Bianquis, honorary President of the Blue Cross, writes that most of their members who were themselves total abstainers served throughout the war in the army and "their individual worth asserted itself in many circumstances." Before the war the society had over four thousand total abstaining members. Its junior society, called the "Band of Hope," has more than two thousand members.

In the recent French election it was very evident the prohibition question had come to play its part as a political issue. Thousands of billboards were covered with the vivid illustrated posters of the *Ligue Nationale contre l'Alcoolisme*. Slogans such as "If France does not suppress alcohol, alcohol will suppress France," and "Three million individuals live on the traffic of alcohol; thirty-five million suffer and die from it," were numerous. And then the appeal to patriotism with this slogan, "Is France, which made such great sacrifices during the war, alone unable to renounce its *aperitifs* and liquors?" It should be understood that these posters refer only to heavy drinks, such as whiskey and gin. No reference is made to wine. wine.

To adopt prohibition France must create another industry for its people, but whether or not they take that extreme step it is not likely that they will ever again allow the drink problem to become such a national peril that one of the nation's most respected officers could write: "Among the dangers which now threatens France alcohol is perhaps as redoubtable as the cannon and bayonets of the Germans."

BETTER PAY AND BETTER TEACHERS

By PHILANDER P. CLAXTON

[*U. S. Commissioner of Education.*]

TEACHERS worthy of places in the schools in which American children are prepared for life, for making a living, for the duties and responsibilities of democratic citizenship, and for eternal destiny can never be fully paid in money. Men and women worthy of this highest of all callings will not think first of pay in money or in any other form. For teachers, as for all other workers, Ruskin's saying holds: "If they think first of pay and only second of work, they are servants of him who is the lord of pay, the most unerect fiend that fell. If they think first of the work and its results and only second of their pay, however important that may be, then they are servants of Him who is the Lord of work. Then they belong to the great guild of workers and builders and saviors of the world together with Him for whom to do the will of Him that sent Him and finish His work was both meat and drink."

It has ever been and probably must always be that workers of whatever sort received the largest part of their pay in kind, as millers take toll of the grist they grind. Those that work with material things that have easily measured cash values receive their pay chiefly in money or in things whose values are most easily measured in money. Other rewards will be less in proportion and in importance. Those who work largely for other than the material results that can be measured by money must continue to be content to receive a large part of their pay in the consciousness of work well done for a worthy cause,

and in participation, by faith at least, in the results, both near and far away in time and in space.

THE TEACHERS' SPIRITUAL REWARDS

Teachers who do their work well and who, either in fact or by faith, see the world made better as a result; individuals made healthier, wiser, happier; sin and suffering made less; the common wealth made more; social purity and civic righteousness increased; public laws made more just; patriotism broadened and purified; State and Nation made stronger and safer against attack from without and decay from within; and the world lifted on to a higher plane and into a brighter sunshine and a purer atmosphere, are possessed of wealth unseen and for most unseeable.

All true teachers will think on these things and many of the best will be attracted to and held in the profession by them. It will be all the worse for the profession and the world when it is not so.

But this should not be made an excuse for putting public or private education on a charity basis, nor for paying teachers the miserably low wages they are now paid. It should not be made an excuse for paying such wages as will not permit school-boards and superintendents to fix reasonable minimum standards of qualifications for teachers because young men and women who expect to teach can not afford to incur the expenses necessary to prepare themselves to meet the requirements of such standards. It should not be made an excuse for failing to increase the pay of teachers, as the pay in other professions is increased, in recognition of proved merit and in proportion to increasing ability gained through experience, continued study, and constant devotion to duty.

BETTER PAY PROFITS THE NATION

Not for the sake of the teachers primarily, but that the schools may be made fully efficient; that children may be well taught; that the material wealth of State and Na-

tion may be increased so that we may have the means of paying our debts, building our highways, caring for our unfortunates, and meeting other public expenses and at the same time have enough for all the people to live in comfort; that our democracy may be preserved, purified, and made more effective; that scientific discovery, useful invention, and artistic expression may be promoted; that we may act well our part in the commonwealth of the world, we must pay such salaries as will bring into the schools as teachers men and women of the best native ability, men and women strong and well organized physically, mentally, and spiritually; men and women of the finest culture and the most thorough and comprehensive education, academic and professional, and so adjust their salaries as to enable them to hold all those who show themselves most capable and best fitted for the work. In this most important of all our enterprises we can not afford to pay less.

Our traditional policy of paying to young and inexperienced men and women with little or no question as to their professional preparation salaries almost as large as we pay to those who have had many years of successful experience had at least one merit. It brought into the schools large numbers of young men and women of unusual native ability and of strong character and sometimes such men and women having also good scholarship and fine culture, willing and eager to do the best they could while saving from their comparatively good wages money to start them in business or home making, or to enable them to prepare themselves for those professions for which adequate preparation is required and demanded.

Many of the ablest men and women in all walks of life have been school teachers. A good-sized ex-teachers' association could be formed of members of any recent Congress of the United States. We have just nominated two ex-teachers as candidates for the Presidency. Unfortunately, however, most of these have remained as teachers in the schools only till they had begun to gain

some little comprehension of their task and some little skill in executing it. But despite their lack of preparation and experience it was good for boys and girls to come in contact with them. From this contact many gained inspiration and purpose.

OTHER CALLINGS NOW MORE PROFITABLE

The time has now come when men and women of unusual native ability and strength of character can make more money in any of hundreds of occupations than they can in teaching. A few of them will teach while waiting to find themselves, or to make money for a start in business, or for paying for preparation for other work. They will accept employment which is at the same time more attractive and more remunerative. From now on schools will be taught (1) by unprepared and inexperienced young men and women of mediocre ability and less, while waiting for the maturity which is required for employment in the minor and more common occupations; (2) by the left overs of such men and women who have failed to find more attractive and remunerative employment elsewhere, but have not wholly failed as teachers; or (3) by men and women of better native ability, stronger character, more thorough education, and the professional preparation which will enable them to succeed to such an extent that they may be induced by the payment of adequate wages to continue to serve their country in a high and valuable way as teachers.

This is the real crisis in education.

We have come to the parting of the ways. Which shall we accept? Makeshift teachers of the first two classes we may continue to get in sufficient numbers by paying salaries relatively as large as those paid in 1914. To have the same relative value and purchasing power as salaries paid in 1913-14, the present salaries and salaries for some years to come must be approximately twice as large as they were then.

OUR TEACHERS MUST HAVE ABILITY

For teachers of the third class—and we should be satisfied with no other—we must pay salaries larger relatively than we have paid at any time in the past, and must adopt a policy which will give such recognition to teachers of unusual ability as will hold them in the service of the schools against the temptation of better pay elsewhere. Temporary increase in pay of teachers will not be sufficient. There must be such guaranty of good wages in the years to come as will induce young men and women of such native ability and character as good teachers can be made of to accept teaching as a profession and take the time and spend the money necessary to prepare themselves for it.

The demand for professional preparation and continued service, coupled with inadequate pay, can only result in supplying the schools with teachers of small caliber, unfit to become the inspirers and guides and educators of those who are to make up the citizenry of the great democratic Republic, solve the problems, and do the work of the new era. Such teachers are not fit seed corn for the new harvest to which we should and do look forward.

For such teachers as we would have in our schools what may be considered adequate pay? The answer is very easy and short. Such pay as may be necessary to get and keep them. In a conference of leaders of national civic and patriotic societies which met recently at my request in Washington it was agreed that to be considered adequate the wages of teachers should be as much as men and women of equal native ability, education, special preparation, and experience receive for other work requiring as much time, energy, and devotion, and involving approximately as much responsibility.

Just how much this will mean in dollars and cents in any community I do not know. To determine the amount in any State, city or country district will require a careful and comprehensive study. But it can quite easily be arrived at approximately, at least, for the country at large.

AVERAGE SALARY SHOULD BE \$2,000

The average wealth production of the adult worker of the United States is not far from \$1,250 a year—probably somewhat more. The average for men and women of ability, preparation, and industry of such teachers as we are talking about can not be less than \$2,000; it is probably nearer three or four or five thousand dollars. But in view of the fact that teaching is by its very nature an altruistic calling, and also because it may reasonably be supposed that the purchasing power of the dollar will increase considerably within the next few years and the cost of living as measured in dollars relatively decrease, let us agree on \$2,000 as an average salary for teachers in the elementary and secondary schools of the United States. This is three times as much as the average for the year 1917-18 and more than 150 per cent above the average for the year 1919-20.

PRISONERS

By NANCY BARR MAVITY

I sit in my garden among the roses.
They are gracious, and stately, and delicately fragrant;
And the wall is high behind them.

I who long for bare hills and deep forests,
And roads that find no town at twilight-time,
And streams that have no name,
And high sea-winds—
I sit in my garden among the roses.

O God when I with wandering soul
Have adventured into death,
Re-fashion me into a sea-gull or wisp of wind
Or a tree on a high crag—
Not a rose in a walled garden!

LABOR'S OPPORTUNITY

By ALFRED E. KEET

A COMMON danger draws people together. The war brought about a new feeling between Capital and Labor—a real community of interest. The result is that to-day labor has, to a much greater extent than ever before, become Capital's junior partner. Capital has thrown the door wide open, and no longer is the working-man a mere employee, with no standing in courts of justice.

He is now on the board of directors and makes his voice heard in council meetings, on such questions as collective bargaining, hygiene, hours and pay—the financial and physical conditions under which he will work.

He has largely become a partner in profits and receiver of dividends—has secured a "life job," with accident insurance and old-age pension—has founded cooperative towns, stores and even banks—lives in his own home and rides in his own motor-car.

In fact, as someone said, not long ago, this is "Labor's Golden Age." Never was he so well taken care of or so prosperous.

In the steel industry, for example, skilled workers earn from \$28.16 a day down to about \$13. The common laborers, many of foreign birth, make about \$9 a day. And there are hospitals, playgrounds, reading rooms, and music-halls at the "Works" for their comfort and amusement.

Verily the American workingman's condition has been vastly improved over the olden days!

Much of this amelioration has come about, not alone through the efforts of humane and far-sighted industrial heads like N. O. Nelson, Andrew Carnegie, Henry Ford,

John North Willys, Henry B. Endicott, and others, but through the waking up of the worker to the value of combination and co-operation. He has, too, made sane and practical efforts to handle himself, through methods, not strikes.

HOW CO-OPERATION SUCCEEDS

At the present moment the workingman is making countless experiments along the line of co-operative effort and seemingly they are proving successful.

A recent example of successful co-operation is found in the organization known as The International Association of Machinists which in four years has increased its membership from 105,400 to 338,315, erected its own home in Washington and established a bank—the Mount Vernon Savings Bank—with deposits in excess of \$1,500,000. The machinists hold \$235,000 of the bank's capital stock, and, in President Johnston's opinion, "This bank is an object lesson of what labor can do where its members have confidence in themselves and work together in a common cause," and he urges labor-associations all over the country to found similar co-operative banking enterprises.

And in North Dakota we find a bank—the Bank of North Dakota—owned and operated by the people of that State. This bank was established by act of legislature in 1919 for the purpose of encouraging and promoting agriculture, the State's chief industry. In fact 80% of its population is rural.

Financing farming enterprises in North Dakota has hitherto proved extremely difficult, and it was at last decided that the only permanent relief practicable was in State ownership and control of marketing and credit facilities. So in 1918 a State government was elected pledged to provide State mills and elevators and a State system of credit.

The bank's capital is \$2,000,000, surplus (March 15) \$40,000; deposits more than \$25,000,000; loans to farmers \$1,780,000.00.

The bank pays interest on deposits, does banking by mail, makes loans on real estate and grain security, and is authorized to offer for sale 5 per cent State bonds in denominations from \$50 to \$1,000. Governor Lynn J. Frazier is chairman of the Bank's Industrial Commission.

The Brotherhood of American Locomotive Engineers also established a bank recently at their headquarters, Cleveland, Ohio, for the convenience and benefit of its 82,000 members.

AN ENGLISH EXAMPLE

England, as is well known, has made rapid strides of recent years in profit-sharing, co-operative towns owned and run entirely by workmen, co-operative banks, stores and factories. The towns of Letchworth and Kettering are examples of model co-operative communities owned and conducted by working-men.

In the United Kingdom this sort of modern industrialism has obliterated old feudalistic systems, and bids fair to revolutionize English business and society.

One of the latest co-operative experiments is the C. W. S., or Co-Operative Wholesale Society, which, in Manchester, England, occupies six blocks with its warehouses and offices and runs 1200 retail stores throughout England. Its stockholders number 4,000,000. Shares are £1 each, and no co-operator may own more than 200.

The C. W. S., with a capital now of close to \$400,000,000, has annual sales of nearly one and a quarter billion dollars, its pay roll for nearly 170,000 employees reaching about \$75,000,000 a year.

The C. W. S., owns a bank, whose yearly business is about two and a half billion dollars, also tea plantations in India, wheat ranches in Canada, and land and farm-holdings in England totalling 40,000 acres.

The total sales of the C. W. S. in 1919 were \$437,400,000, and the Society is adding to its land, factories and docks to the tune of several millions of dollars annually.

The success of the English co-operative movement has precipitated a conflict between co-operative enterprises

and private traders. The Co-operators declare their intention of eliminating the private trader altogether. So the battle is joined.

PROFIT SHARING

There is still a little diversity of opinion as to the wisdom of sharing profits with employees. Like all new schemes perfection has not been attained yet, and mistakes have been made. The idea is excellent, but many of the methods used in applying it have been criticized, even by the employees themselves. And there are cases where the employees begged for its discontinuance.

But after a fair trial profit-sharing in the main seems to be the most effective way for capital to enlist labor's greater interest and so efficiency, and the best way to distribute these profits or bonuses is weekly, not annually or semi-annually. Mr. Schwab, Henry Ford and other industrial leaders are firmly of this opinion. The profit, or bonus, should go into each week's pay envelope.

Labor has been somewhat suspicious of profit-sharing, especially in plants where all employees did not share equally. Where small amounts were given to one man and large ones to another jealousy and bickering resulted. The system in practice at the Endicott-Johnson shoe manufacturing plant in New England has given satisfaction and satisfied everybody. At this plant, after dividend requirements have been met, the surplus profits are divided between the common stockholders and the employees, half and half, each employee getting the same sum. That is to say, the share for the employees is divided by the number of employees and the office-boy gets the same amount as a foreman or executive.

Mr. Hoover, in discussing labor unrest, said as to profit-sharing:

"If profit-sharing is to be based on the conception that wages are to be just and that profits are to be an addition to pay, then it would be in proper form, but not when used as a weapon to hold down a man's pay. The intangible agitation in industrial life concerns the question of a

division of surplus, and not the question that employees want to manage the business."

Mr. Hoover hints that the "joker" in profit-sharing is the keeping of a man down at low pay, while a tempting bait is held out to him in the shape of a big bonus at Christmas or at the end of the year. This share of profits, plus his salary, may or may not bring his average weekly pay to what he is entitled to.

But it is open to doubt if any workman, union or non-union, would work for less than the standard price for his kind of work no matter how attractive the bait held out in the way of profit-sharing or bonuses.

CAPITAL A PARTNER

There was a time when, if a workman had tried to buy any stock in his employer's business, he'd have been laughed at. But times have changed. Small and large corporations are now glad to have their workmen for shareholders, to sell them stock on the most favorable terms as to price and time for payment.

Only recently it was announced, for example, that more than a thousand employees of the Lehigh Valley Railroad had purchased stock in the road, thus becoming in part its owners.

And of course it is public knowledge that on several occasions during recent years the United States Steel Corporation has sold stock to its employees on unusually favorable terms. More than 60,000 of its employees have in this way become shareholders, and so partners. This corporation also leads in profit-sharing, through a system of bonuses, and now has a pension-fund of \$12,000,000. It was started in 1912 by Andrew Carnegie with \$4,000,000, the Company later adding the balance.

The N. O. Nelson Manufacturing Company of St. Louis was the pioneer in profit-sharing in this country, and before many years their example was widely followed.

The International Harvester Co., Eastman Kodak Co., National Cash Register Company, Procter & Gamble, Swift & Company, all have profit-sharing and pension

systems, and conduct wonderfully effective welfare features. The American Telephone & Telegraph Company, with upwards of 175,000 employees, has a pension fund of \$10,000,000. The Standard Oil Company also maintains a pension system.

In the transportation field no fewer than twenty-two railroads now pension their employees. The custom was started by the Pennsylvania Railroad but Canada, as far back as 1874, was the pioneer so far as railroads are concerned.

All this gives some idea how pay, working and housing conditions have improved for the workingman during the past quarter century or so. The American workman now gets better pay than any other workman in the world, has a better workshop and better place to live in than any other workman in the world. The latest and most improved machinery is at his disposal, his factory is new and up-to-date and provided with the latest safety devices and hygienic conveniences.

All these, and other welfare experiments, only serve to emphasize the truth that material and humane progress go hand in hand. Labor and Capital are dependent upon each other. Neither can get along without the other. Their interests are common, and the greater good will existing between them the greater their mutual prosperity. Workmen are not machines—neither are employers heartless, selfish monsters whose god is the dollar.

As Henry B. Endicott, the Massachusetts shoe manufacturer and "strike mediator," says:

"There will be no happiness and rest in industry until the workers cease to look upon the employer as their enemy and until the employer considers his employes his allies. Treat a man as a man whether he deserves that treatment or not, if you want to get any results of lasting value."

His plant employs some 13,000 workers and has never had a strike. His employes have also steadily refused to be unionized.

THE AFTERMATH OF WAR

But there are breakers ahead for both Capital and Labor. During the war and for sometime afterwards labor was well-employed at high and rising wages. He was working not only full time but overtime, and his pay envelope was of huge proportions, for Capital was making immense profits. Now, a different condition of things has come about. Business is slowing down, prices are dropping ten to fifty per cent, factories are closing down or working only part time and labor is no longer scarce or unobtainable. And the manufacturer says he cannot continue cutting prices unless he cuts wages too.

Now the question arises, is labor able to stand a cut in wages, or less work, or a period of no work at all? Has Labor profited by the lessons of the past, and, during this period of unexampled prosperity, intelligently bulwarked itself against business depression and consequently lessening of work, or its total cessation, for long or short periods?

Will Labor, in the face of these changing conditions strain every nerve to increase the day's output and so enable Capital to continue paying him his present high wage, or will he let his great opportunity to prove himself in reality Capital's partner and ally slip by?

Greater production and less spending will solve the problem should it acutely arise. This is Labor's opportunity to prove himself Capital's intelligent and friendly ally and partner by speeding up on production—doing a bigger day's work.

Will he, though, in spite of his great opportunity, remain indifferent to changing trade conditions, and, when an unemployment period comes, rely upon his union or brotherhood to help him out?

If he does, then he will witness the usual stagnation in American industry, he will see exports drop off and imports increase as the busy European and Asiatic producer speeds up and gains the business he is throwing away.

THE THEATRE IN REVIEW

By C. COURTENAY SAVAGE

GEORGE M. Cohan, who first gained fame by waving the American flag while dancing, has become a producer, independent of his one-time partner, Mr. Sam Harris. For a year he has been writing and re-writing plays, and with a suddenness he has turned them loose on Broadway, many of them after extensive out-of-town engagements.

The first of the versatile gentleman's four offerings was a comedy of temperament, "Genius and the Crowd," and of it the less said the better. It departed almost as soon as it arrived, leaving nothing of value behind. A second, "The Tavern" was a little more happy. It is an old-fashioned melodrama, of the costumed type, which Mr. Cohan has taken and teased as he did the very successful "Royal Vagabond." This makes the original script practically worthless for one is much more interested in the amusing idiosyncrasies that the play develops, than in any possibilities of plot. Incidentally, "The Tavern" marks the return to the stage of Arnold Daly, who has been playing before the motion picture camera.

Mr. Cohan's third venture proved even more interesting, for at the last minute George M. himself decided to play the leading rôle, and slipped in very quietly without any blare of trumpets of hysterical press notices, to give one of the best performances of the year. There is a good deal that smacks of *Wallingford* in this play, "The Meanest Man in the World," which tells of a fellow sent out by a law firm to collect an over-due bill from a decrepit, small-town merchant, and how this chap puts the small town and the merchant back on the map, and makes

everybody, including himself, rich. Plenty of laughter and plenty of George M.

Then, there's "Mary"! The very name seems to have not only a fascination, but to be the spirit of good luck for Mr. Cohan. Mary has been the heroine of half a dozen of his best songs of previous years, to say nothing of "Forty-five Minutes from Broadway," one of his most successful comedies.

The new musical play has the familiar small-town touch which Mr. Cohan loves, and does best. This time it concerns portable houses and oil wells, also plenty of romance. It is staged in the usual Cohanesque manner, plenty of lively fun, youth, and, of course, dancing. Its chief song, "The Love Nest," found its way to the phonographs of the nation a month ago, for long before he thought of Broadway, Mr. Cohan had shown several of the larger cities his latest musical comedy, and they all liked it to the extent of a long run.

It really is a case of three cheers for George M.

Louis Mann has gone back to the early days of American history for his latest play, "The Unwritten Chapter." It tells an incident of the American Revolution, of the Jewish banker, Haym Solomon, who, together with Robert Morris, helped finance our Independence. This practically unknown figure has been worked into the central character of an interesting, though episodic, drama, which is at all times historical in theme, and, unfortunately, not over-rapid in action. Mr. Mann gives his usual excellent Jewish characterization, and finds excellent support from a large cast which includes Arleen Hackett as his wife, Howard Lang and Lucille Watkins as Mrs. Robert Morris who helped, by her luncheon party, to detain the British and allow Washington's escape from New York.

"Welcome Stranger," Aron Hoffman's new play, is like "The Unwritten Chapter," pretty frank Jewish propaganda. It tells how *Isidor Solomon* invades a small, hard-headed New England town, and by sheer personality wins over the town in spite of racial differences. There are a

good many hearty laughs in the four acts, chiefly due to George Sidney in the leading rôle.

Mr. William Hodge, whom someone once called America's greatest road actor, has brought his latest play, "The Guest of Honor," to New York. It is not a bad play, but it is hardly the popular type for big city audiences. However, Mr. Hodge always has a certain clientèle that goes to see him, so he is sure of his city run, before the starts out for the smaller towns.

Ian Hay, better known for his war work and his popular novels, is the author of the very amusing comedy of English life, "Happy-go-Lucky." It is English to the last degree, and as such, may not have an overwhelming appeal to American audiences, but no admirer of Dickensian characters will be able to resist O. P. Heggie's *Samuel Stillbottle*, the plaintiff's man, who comes to evict the family and stays to act as butler, and so awe and win over the lordly *Mainwaring* family to a love match between *Richard Mainwaring* and the humble and lovely *Tillie*.

Another play of English life introduces *Mrs. Gubbins* who, as characterized by the best cockney of them all, Beryl Murphy, is the most delightful part of Mr. Max Marcin's comedy, "Three Live Ghosts." Like Barry's *Old Lady with Her Medals*, *Mrs. Gubbins* sits over her pot of tea, and thinks of the boy who didn't come home from war. To make it a play, in they march, the live ghosts, one of them a first-rate crook of the most humorous and lovable type, and *Mrs. Gubbins* is so interested in what he brings home, that she suggests sending him out again to see what he will bring the next time. Frank comedy throughout, and a pleasant evening.

It is a crying shame that such an excellent actress as Alice Brady should be forced to accept as a vehicle, "Anna Ascends," billed as a new American play by Harry Chapman Ford. Miss Brady has developed in the last few years to be an artist of rare ability, and she is able to take the trashy material of this play,—a Syrian girl fighting her

way up from the post of lowly immigrant and make it interesting, even human. A great many people are going to want to see the play only because of her impersonation. It is a delight to even imagine what she could do with a real play.

"Mecca" is the latest musical spectacle to move into the dignified walls of what was once The New Theatre, and by its joyous lavishness, eradicate the memories of our failure to establish a real national theatre. The play is Oscar Asche at his best, which means it is more entertaining than "Chu Chin Chow." It is marvelously costumed, superbly mounted as to stage settings, with incidental dances by Fokine, that quite surpassed any of those which helped to make "Aphrodite" a popular success last year. The spectacle is built about another Oriental story, allowing for the characterization of color, passion, beauty, also the subtleties of hatred and revenge. It is superbly acted, with Gladys Hansen welcomed back to the stage as the lovely *Sharazad*, and Linoel Braham as *Ali Shar*, "the strong man" of the story.

"Little Miss Charity" might be called one more musical show. There is nothing particularly distinctive about it, it is just pleasing,—a nice evening's entertainment, made so by the clever work of Frank Moulan, who is always a comedian and Marjorie Gateson, whose charm can best be explained by that much over-worked word, "Personality."

Personality, by the way, can also be used in connection with a young lady who flashed before a metropolitan audience and proved the most interesting feature of the new production, "Kissing-Time." She is Dorothy Maynard, quite outshining Mr. William Norris and Edith Taliaferro, who might be said to play the featured rôles. "Kissing-Time" is a not at all unusual light comedy with music, laid in Paris, and depending upon its plot for the age-old idea of a young man who must have a wife at once, and so borrowed the nearest lady, who happens to be the girl to whom he was betrothed in his early years. There

is a very hard working and eye-delighting chorus to back up Miss Maynard's work, which means that it is possible to find an evening's diversion from the movies, if nothing else.

"Tip-Top" is the name of Fred Stone's latest musical extravaganza. It would be possible to dismiss it in a single sentence by saying that it is the usual Fred Stone show, or you could go and write an article on the art of clowning, as embodied by Mr. Stone's versatile self. The fact remains that it is Fred Stone's new show, and he has most of the old favorites with him, including the Brown Brothers, of saxophone fame, and Violet Dell, who still stands on Mr. Stone's feet when they dance.

"Pitter Patter" is one of those musical re-vampings. This time the adaptors have taken Willie Collier's old farce, "Caught in the Rain," and added the necessary chorus girls, a prima-donna, etc. Much of the music is pleasant, and both William Kent and Helen Bolton are veterans who cannot help but lift the quality of any material given them.

"Broadway Brevities" might have been something very startling, for the cast contains Eddie Cantor, Bert Williams and George LeMaire, who is the producer and author of many of the scenes. However, the promise was never harvested. There was a certain amount of comedy, but not of the rich variety. The production is lacking in one virile comedy personality that would carry it to really big success, that is, the type of success Mr. Jolson brings when he moves into New York. The stagings were often handsome, and a few of the songs pleasing, if not lifting.

Just for good measure in the way of musical entertainment, there is "Jim Jam Jems," a review not quite as clever as Mr. John Cort's recent success, "Listen, Lester," but still serving because of the vaudeville specialties introduced to keep together the musical numbers.

A SHELF OF NEW BOOKS

IT IS only natural that the "Life of Andrew Carnegie," philanthropist, self-made millionaire, and one of the truly great figures in the history of American business, should find its way into book form. (Houghton Mifflin Co.) Fortunately, the volume comes as an autobiography, not as an appreciation too often written by a willing and admiring, but not always accurate pen. It needs Mr. Carnegie's personal touch to make a lasting story of his fight from messenger boy to steel master. He is able to impart to his pages the inspiration, the ambition, which was to be the most virile portion of his youth. His business experiences, his labors in the formation of the steel industry as it exists today are romance to the business man, and his several expressions of the problems of capital and labor might well be seriously considered, even though he did not face the problems of reconstruction that we are facing.

Norman Hapgood's "The Advancing Hour" (Boni & Liveright) is an interpretation of his thought on the problems and issues confronting the American public today,—Socialism, Liberalism, Bolshevism, political outlook in the United States and more or less of a glorification of Mr. Wilson. Mr. Hapgood always has the courage of his convictions, and never hesitates to say what he thinks.

"The Course of Empire" (Boni & Liveright) is, at times, a rather ponderous, but always scholarly book by R. F. Pettigrew, ex-United States Senator from South Dakota. Its appeal is largely economic, the "course of empire" as it passes through the halls of Senate. In fact, a large portion of the book is made up of quotations. For a keen and careful student with plenty of time the volume will prove valuable.

G. T. W. Patrick, Professor of Philosophy in the State University of Iowa, is the author of "The Psychology of Social Reconstruction" (Houghton Mifflin Co.), an interesting little volume written in a semi-humorous, popular style. Professor Patrick believes, for instance, that beer and communism are contrary to the fundamental process of human psychology, and he goes to work to prove it, also a number of other beliefs equally as interesting. For the reader in a hurry, the book can be made either a subject for serious reading, or hastily perused with an idea of enlightenment.

Francis Brett Young's "Poems" (E. P. Dutton Co.) disclose him as interesting a versifier as he is a story-teller. His work has a strange beauty that is original, and yet at all times graceful.

The success of Ida A. R. Rylie has been the gradual growth of the writer who is first ambitious, second, a conscientious worker. Not so many years ago her works that reached an American audience were regarded as "Well, here's another story about India, by another English writer." Then, by the gradual process of time and labor came "Towards Morning," and now "Children of Storm." (John Lane Co.) This new book is more than an interesting novel. It has the underlying theme of class distinction in regard to marriage, and even far greater than the social readjustment that must follow the close of the war. These themes lie deep, flashing occasionally through a character, or an expression, and made more interesting because of the lack of preachment. For her sugar coating she has one of the prettiest love stories of the year, but perhaps pretty is not the right word, for that is apt to be misconstrued as "simple—sweet," while there is nothing cloying the romance of the grocer's son, and his lady of rank.

A really fine book is Mrs. Wharton's "The Age of Innocence." (D. Appleton & Co.) The title comes from the setting, New York City of the Seventies, when they thought of building an Opera House "way uptown" in

the Forties, when the great city had passed its mid-century growth, and feeling the first throb of the sophistication that was soon to arrive. The story concerns the love affair of the socially proper Newland Archer, and a lovely American girl who has left her husband of title and flashes over innocent New York society, as a disturbing element. It is a typical Mrs. Wharton tale, the subtleties of social life, the daring of character, the call of the new, and the staid of the old-fashioned respectability. It is not another "House of Mirth" or "Ethan Frome" but is welcome as the first novel in some little time from the pen of one of America's most gifted authors.

Ridgewell Cullum, like Miss Wylie, has been slowly arriving for several seasons. His work is always of the out-of-doors, chiefly the Northwest, but none of it can be compared with his scholarly and grippingly interesting novel, "The Heart of Unaga." (G. P. Putnam's Sons.) Mr. Cullum has taken more or less familiar ingredients of a story of the Northwest, the policeman, the girl, the Indian character, the wicked agent, and made them act surprisingly like human beings. His chief glory lies in his knowledge of Indian character and lore, and the parts they can play in a big gripping drama. Nothing gushingly romantic about the story, but the type that people who like virile stories of the out-of-doors will find welcome,—doubly so when it is chronicled that the story is a long one, running more than a hundred and twenty-five thousand words,—which, after all, is about the right length for a novel.

Following the psychic trend Florence Barclay (yes, she wrote "The Rosary") has written a new story which she calls "Returned Empty." (G. P. Putnam's Sons.) It concerns a woman whose husband is killed,—and how she prays and longs for his return,—in the form of a child she can love. The child arrives on earth, being left on a convenient door-step, with the remarkable tag, "returned empty." Later you will discover that it means that he had been sent to earth without a soul. Of course, he meets the

lady who desired his presence on earth,—and well, it's not a long book. One of the nicest things about it is the frequent reference and quotation from Tennyson's "Crossing the Bar" which still remains a wonderful verse. Mrs. Barclay has a host of friends,—some of them may like the new story.

"The Adventurous Lady" (D. Appleton & Co.) is not J. C. Snaith at his best. But then one cannot write a story like "Undeclared" or "Broke of Covenden," to say nothing of one or two others, with the ease with which we turn on the cold water tap of the morning bath. The new story is a comedy, not unfamiliar in the main theme which allows the heroine to impersonate another, but still it sparkles, and holds the interest with its plausible complications. And it is delightfully written in the simple English and English writers know how to use.

"Color, passion, ferment, the mystery and illumination of motives, the drama of modern life, give to 'The Dark Mother' (Boni & Liveright) what Jacques Copeau calls its epic quality." Such is the announcement on the cover, and to a degree the cover is quite right. The story might be called an epic because it covers in detail a great deal of ground in the life of two young men of vastly different temperament. Much of their adventure with "the dark mother"—Life—is interesting, some of it dull, and quite a bit of it could not be read in the family circle, unless the family circle was very, very modern, and more than a little "free."

THE EDITORIAL TABLE

America In Danger

NATIONAL character is dependent upon individual morale. America is in danger. War has burdened us with taxes, partially the result of extravagance and profiteering, and partially the natural aftermath of colossal loans. Our national income has also been depleted by the loss of huge revenue taxes. We, too, are paying the high cost of necessities because of our tremendous exportations. Europe is quarreling over indemnities, territory and pre-war extension of credit, now due and overdue. Into this latter mêlée we are invited to sit as arbiter and participant. The reactions of the conditions of war are numerous and significant. Our own burdens and prohibitive measures are breeding hypocrites. Our interests in foreign issues are splitting our lines of national cleavage. We are confronted with a new order and a new disorder; we are surfeited with propaganda in the interests of alien nations. These are danger lines in the home-made propaganda of Americanization. Call it reactionary, or what you will, every born and sworn-in American must get back to the fundamentals of what American citizenship stands for,—America first, America always,—and laws and lawmakers that make loyalty a pride and American character patriotism.

The Editorial Table is viewing the heaving waves of contradictory currents of public opinion. It feels the upheaval of varying opinions and protests. It finds itself unsettled by the billowy variations of a seething foment. It is in the midst of a national political campaign, when every man and woman needs to be guided by sound sense and defined policy stuck to and carried into legislative action, of unvarying policy. Out of November may we

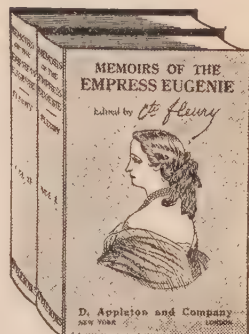
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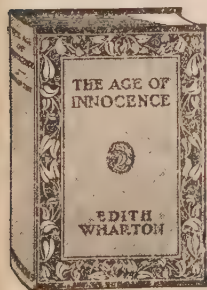
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hope for a definite expression from that great wave of solid Americans. May we hope for a return to the normal, may we see a party in the saddle that knows how to ride, and rides to stable conditions and sound domestic and foreign relations—and accredits to the rest of the world the ability to do likewise, perhaps with our co-operation, but without our interference in affairs that do not touch our borders.

Racial Cleavages Asserting Themselves

THE passage of thousands of years in the ancient civilizations has failed to eradicate racial distinctions. Today the quarrels of Middle Europe are the result of racial antipathies. The secret of the melting-pot is still undiscovered. Races do not utterly blend, even in the commingling of generations of blood.

This is a fundamental and complex American problem. It concerns government, religion and social influences of vital significance. Our racial groups are segregating rapidly in one form or another. In our earlier development these groups manifested themselves in social and fraternal forms, not in any sense to the detriment of our political and industrial development. The question of a common citizenship interest did not enter into their organizations. Patriotism and love of their adopted country was second only to religion. This zeal was the aftermath or reaction of "persecution," real or fancied, of government or religion or the social order of the countries from which they emigrated. In the last half century racial cleavages have gradually been restored in this country and the issues, hopes and aspirations of native lands have stirred the pulse and aroused the blood of sons and son's sons in America.

Hereditary transmission is immutable. Inter-marriage does not eliminate the breed. The children and children's children reassert the nativity and racial characteristics of their ancestors. So we find the ancient racial divisions of our immigrants reasserting racial lines.

In addition to the hereditary outcroppings we, as a nation, are confronted with the influences, also, of more recent immigration, fanning to life the racial instincts of the descendants of our earlier peoples, come here to seek freedom and better their condition in various ways. Still a third condition confronts us as a nation, seeking homogeneity and a common loyalty under one flag. We refer to the foreign propaganda that is flooding this country, appealing first and finding sympathetic lodgement in the hearts of the descendants of alien nationalities, and second, appealing to the nation as a whole, often antagonizing descendants of races of different territorial ambitions, creed, or religion.

Our peoples inhabit a "rented house," in which their bodies live while their spiritual allegiance is divided. To utterly weld this spirit into patriotism and love of country is the fundamental of Americanization. Influences that preserve a mode of life and a method though that is not American, will defer the object.

Foreign propaganda should be censured and restricted. Foreign language newspapers, magazines and books should be permitted under regulating provisions. The public schools should be free from propaganda. Patriotic demonstrations and commemorations should be fostered by the municipal, State and national government. Freedom of speech should not be interpreted as license of destructive agitators. While racial predilections may not be uprooted, they can be turned to account by inspiring within their activities, always the basic theme that makes for love and loyalty in citizenship.

The Mentally Lazy

WHAT'S the matter with your brain? Is it working only eight hours a day after the custom of the Amalgamated Plumbers' Association? And are you, too, talking of "brain-fag"? Or is it "brain-fog"?

If we question the average layman he will doubtless assert that what we are pleased to label "Civilization,"

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which may be 100,000 or 200,000 or more years old, has unquestionably advanced the world in the knowledge of natural science, social uplift and mechanical inventions; but are we not—reluctant though we be to consider it—compelled to admit that all these advances have been due in the past and will continue to be due in the future to the few and not the many?

Query the average high school student as to the functions of the human body and he will turn to the page in his physiology which informs him that the slightest wink of his eyelid is directed from his cerebellum. Thus, a part of the brain works overtime—according to the rapidity and number of frequency of the winks. And any mere surface dabbler in psychometry will tell us that the brain not only works overtime, but all the time, even during sleep, producing somnambulistic “movies” actuated by, sometimes wise, but generally, foolish dreams. But that is precisely what happens to old Towser who lies sleeping on your hearth—or next to your steam radiator—and whose four legs go back and forth with perplexing rapidity under the illusion that he is in hot pursuit of Tabby on the back fence, or in the areaway of the apartment house.

Towser gets leg-weary, but never “brain-fag.”

A few men in the past, like Galileo and Newton and Proctor and Gosse and Draper and Darwin and Spencer, and a few men in the present, like Edison and Marconi and Tesla and Einstein may have been and are frequently leg-weary, but none of them ever have been known to seek rest for the brain. These men have been and are working day and night with their brains to advance the world while the greatest effort many of us engaged in during the late summer was to advance the World Series. The mind of Einstein, taken as one illustration—is so trained, so keen, so searching, that he has learned the seemingly invisible secrets of Nature. Even his latest book, which he wrote to simplify his great work on “Relativity,” so that the layman might better understand it, is so profound, because of the

profundity of his subject, that the average mind must bestir itself to grasp an outline of his meaning.

And these tireless workers have struggled through the years so that the struggle for existence for the rest of us may grow less and so that we may all enjoy the bounties of a world which have been waiting in the past and are waiting in the present for development through the God-given possibilities of the human brain.

Just for a moment let us suppose that the one billion, five hundred and more brains, representing the intellectual faculties of the inhabitable globe, had been and are now all working for the progress of humanity.

How far, then would Civilization have advanced yesterday—how far would it advance tomorrow?

Oh, ye mentally Lazy, how many of *you* have advanced further than the wiggling legs of dream-befuddled Towser?

BEAUTY

By BETTY DICKINSON FRAZEE

BEAUTY! how often in communion we
 Have met in various haunts, when quiet mood
 And weariness of mind toward some dim wood
 Hath led my world-sick soul to rest and thee;

There in the sweet seclusion 'neath some tree
 Have I found peace where shadows brood,
 And thought all life beyond-believing good—
 Until called back by grim reality.

Then leaving thy companionship, in pain
 Have I crept back, to find deceit and lust
 Wearing thy name and dragging it in dust,
 And weeping I have turned away again.
 Oh Beauty! if deceiving, still be kind:
 Blind me that I may worship—being blind.